

Nuclear Decommissioning Authority
Draft Business Plan
2012 - 2015

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December 2011



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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.

Introduction to the Consultation

How to Respond

In this consultation, the NDA wants to hear from members of the public, nuclear regulators, employees within our Site Licence Companies (SLCs) trade unions, local authorities, Site Stakeholder Groups (SSGs), Non-Governmental Organisations (NGOs) and any other organisation or public body. In your response please state whether you are responding as an individual or representing the views of an organisation. If you are responding on behalf of an organisation, please make it clear who the organisation represents and, where applicable, how you assembled the views of the members.

We are happy to receive comments on any aspect of our Draft Business Plan and these will be considered where appropriate. When considering responses to this consultation, the NDA will give greater weight to responses that are based on argument and evidence, rather than simple expressions of support or opposition.

This consultation began on **12 December 2011** and will close on **3 February 2012**.

Online Facility – Responses to this consultation can be submitted online, via the NDA website: www.nda.gov.uk

By Letter, Fax or email – Alternatively, you can respond by letter, fax or email via the contact details below.

Address to – Business Plan Consultation, Nuclear Decommissioning Authority, Herdus House, Westlakes Science and Technology Park, Moor Row, Cumbria, CA24 3HU

Fax – 01946 518431

Email – businessplanning@nda.gov.uk

Help with Queries

Any questions or queries relating to this consultation can also be directed to the address above.

Confidentiality and Data Protection

Information provided in response to this consultation, including personal information, may be subject to publication or disclosure in accordance with the access to information regimes (these are primarily the Freedom of Information Act 2000 (FOIA) (*ref 1*), the Data Protection Act 1998, (DPA) (*ref 2*) and the Environmental Information Regulations 2004 (EIR) (*ref 3*).

If you want information that you provide to be treated as confidential, please be aware that, under the FOIA, there is a statutory Code of Practice with which public authorities must comply and which deals, amongst other things, with obligations of confidence. In view of this, it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information, we will take full account of your explanation but, cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on the NDA.

The NDA will process your personal data in accordance with the DPA and, in the majority of circumstances; this will mean that your personal data will not be disclosed to third parties.

Additional Copies

An electronic version of the Draft Business Plan is available on the website www.nda.gov.uk

You may make copies of this consultation document without seeking permission. We are not producing hard copies of the consultation document this year, however if you require a printed copy, please email businessplanning@nda.gov.uk.

Consultation and Conduct

If you have any comments or complaints about the way in which this consultation has been conducted please mark them 'Business Plan Consultation' and send them to:

By Post - address to – NDA Enquiries, Nuclear Decommissioning Authority, Herdus House, Westlakes Science and Technology Park, Moor Row, Cumbria, CA24 3HU

Email – enquiries@nda.gov.uk

A copy of the consultation criteria from the Government's Code of Practice on Consultation is provided at <http://www.berr.gov.uk/files/file47158.pdf>

Next Steps

The NDA will consider responses it receives to the consultation, and outputs from any events, and revise the Draft Business Plan as appropriate. Subject to final approval by both the UK and Scottish Governments, the NDA will publish the final version of this document by the end of March 2012.

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Foreword



Our Business Plan for 2012/2013 sees us entering into the second year of funding allocated in the last Spending Review. This allows for an average expenditure of almost £3 billion a year in real terms over a four-year period. The focus of this year's Business Plan remains unchanged from last year, with the emphasis on delivery of commitments.

The highest priority remains delivering and accelerating the work on the Legacy Ponds and Silos at Sellafield. The proportion of expenditure on these programmes has risen considerably and there is a greater sense of urgency and real progress on site. The new Sellafield Performance Plan (*ref 4*) is now being used as a basis for building our business plan targets for the site and successful delivery will ensure that critical national infrastructure continues to operate effectively. We are confident this is a credible plan for Sellafield, underpinned both technically and in terms of capability, which will give us the best chance of success.

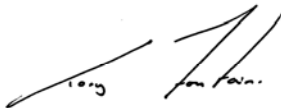
At the time of writing this foreword we have announced that Babcock Dounreay Partnership (consortium comprising Babcock Nuclear Services Ltd, CH2M Hill and URS Holdings (UK) Ltd) has emerged as the preferred bidder to take the site to its Interim State. Their proposal will deliver significant acceleration and costs savings for the taxpayer through a combination of innovative technology and enhanced productivity. We are working on a smooth transition and the key will then be to ensure plans translate into action.

The new optimised route to Care and Maintenance across the Magnox fleet that was outlined last year has been successfully turned into firm plans which are already being taken forward. A similar approach is now being adopted at Harwell and Winfrith to secure a better outcome across the two sites.

As stated in last year's plan, pressure on our funding will continue and we remain committed to continuous, rigorous oversight of all activities to ensure we are spending taxpayers' money effectively. In particular, we will be dealing with the loss of income arising from the closure of Oldbury and we will continue to target further reductions in support and overhead costs in order to maximise funds towards front line activity.

In this Business Plan we have included a high level 20-year view of important activities drawn from our current plans in order to provide greater context for the shorter-term activities highlighted in the plan. Throughout the estate we are reliant on aged and fragile plant and infrastructure which means it is likely there will always be a balance between setting ourselves and our contractors challenging targets and some changes to the overall plan as we re-prioritise within our budget.

This will also be my last Business Plan as I am about to embark on a new challenge back in the oil and gas industry. I believe that a stronger culture of delivery is now part of the NDA and wider estate, and look forward to watching progress from the tremendous talent in the industry.

A handwritten signature in black ink, appearing to read 'Tony Fountain', written in a cursive style.

Tony Fountain
Chief Executive

Introduction

This Business Plan sets out our key objectives and plans for delivering our priorities over the next three years.

Our remit

The NDA is a Non-Departmental Public Body (NDPB) set up under the Energy Act (2004) (*ref 5*) to ensure that the UK's 19 designated civil public sector nuclear sites are decommissioned and cleaned up safely and efficiently.

The Secretary of State of the Department of Energy and Climate Change (DECC) approves our Strategy and Annual Plans in consultation with the Scottish Ministers. The NDA Board is responsible for delivery. The Government holds us to account for performance against our Strategy and Plans. The governance function of DECC is provided to DECC by the Shareholder Executive (ShEx).

DECC and the Scottish Government have a target to make tangible progress in decommissioning and clean-up. This is demonstrated by a reduction in the UK civil nuclear liabilities and of the risks associated with high hazards (by progressively mitigating hazards and ensuring radioactive waste continues to be put into a passively safe form). Progress on these activities is reported in our Annual Report and Accounts (ARAC).

Delivery of the mission

Each of our 19 sites is operated by one of six Site Licence Companies (SLCs) under contract to the NDA (see page 20 for further information). SLCs are responsible for day-to-day operations and the delivery of site programmes. Parent Body Organisations (PBOs), selected through a competitive process bringing in private sector expertise own the SLCs for the duration of their contract with the NDA earning fee based on performance and efficiencies gained. As part of the next phase of competitive process, the Magnox and RSRL competitions will commence in FY 2012/13.

Our Funding

Funding Framework

We are funded by a combination of direct UK Government grant and income from commercial operations.

Government Funding

The last Spending Review secured funding for four years (April 2011 to March 2015).

Commercial Income

Our commercial operations fall broadly into two areas:

- electricity generation and associated trading
- spent fuel management, including reprocessing

The nature of our commercial activities means that we have to manage a significant degree of income volatility, largely due to our operations relying on ageing assets and infrastructure for example Wylfa is over 40 years old. Furthermore, this income will decline in future years as plants close and enter decommissioning.

Our objective is to maximise revenue from our existing assets and operations to help fund decommissioning and clean-up, thereby reducing the burden on the UK taxpayer. To achieve this we will include optimised income from electricity generation, leasing property, selling land and other assets in response to market interest.

Prioritisation and Allocation of Funding

Within affordability constraints, we will seek to maintain progress and maximise value for money by focusing on the highest hazards and risks, whilst ensuring that safe, secure and environmentally responsible site operations are maintained across our estate.

The Spending Review process used criteria drawn from our Value Framework to evaluate options. These criteria (Affordability (short, medium and long-term), Value for Money, Safety and Environmental Impact, Deliverability, Socio-Economic and UK Government Policy Impact) will inform the management decisions to be taken in the process of allocating available funding over the Business Plan period.

Planned Income and Expenditure in 2012/2013

This Business Plan sets out our anticipated income and expenditure for 2012/2013 in line with the settlement agreed in the 2010 Spending Review.

Our total planned expenditure for 2012/2013 is £3 billion, of which £2.3 billion will be funded by UK Government and £0.7 billion by income from commercial operations. Planned expenditure on site programmes will be £2.8 billion, while non-site expenditure is expected to be £0.2 billion. This non-site expenditure includes skills development, socio-economic, Research & Development (R&D), insurance and pensions costs, fees to SLCs, implementing geological disposal and NDA operating costs along with the other activities detailed on page 12.

Planned Income and Expenditure Summary

| £m | | Decom & | Total Operations Costs | | | 2012/13 | 2011/12 |
|---|--------------------------------|----------------|------------------------|--------------|----------------|----------------|---------|
| SLC/Subsidiaries/Sites | | Clean-up | Running | Capex | 2012/13 | 2011/12 | Plan |
| | | Costs | Cost | C | Plan | Plan | Plan |
| | | A | B | | | | |
| Magnox Ltd | Berkeley | 54.6 | | | 54.6 | 47.3 | |
| | Bradwell | 82.3 | | | 82.3 | 70.9 | |
| | Chapelcross | 53.1 | | | 53.1 | 59.8 | |
| | Dungeness A | 41.4 | | | 41.4 | 41.0 | |
| | Hinkley Point A | 35.1 | | | 35.1 | 27.4 | |
| | Hunterston A | 31.9 | | | 31.9 | 38.7 | |
| | Magnox Support Office | 58.5 | | | 58.5 | 72.8 | |
| | Oldbury* | 77.8 | | | 77.8 | 77.4 | |
| | Sizewell A | 39.6 | | | 39.6 | 40.4 | |
| | Trawsfynydd | 77.7 | | | 77.7 | 86.4 | |
| | Wylfa | 0.0 | | 89.0 | | 89.0 | 87.0 |
| Electricity Trading | Electricity Trading | | 79.6 | | 79.6 | 78.0 | |
| Research Sites Restoration Ltd | Harwell and Winfrith | 59.6 | | | 59.6 | 65.5 | |
| Dounreay Site Restoration Ltd | Dounreay | 161.0 | | | 161.0 | 159.3 | |
| Sellafield Ltd | Sellafield | 696.5 | 672.9 | 261.0 | 1,630.3 | 1,554.6 | |
| LLWR Ltd | LLWR | 30.0 | | | 30.0 | 36.1 | |
| Springfields Fuels Ltd | Springfields | 41.9 | | | 41.9 | 48.5 | |
| Nuclear Transport and Contract Management | International Nuclear Services | | 145.0 | | 145.0 | 108.2 | |
| Non site expenditure | | 177.1 | | | 177.1 | 189.6 | |
| TOTAL | | 1,718.0 | 986.4 | 261.0 | 2,965.5 | 2,889.0 | |
| Income | | | | | 716.5 | 866.5 | |
| Net | | | | | 2,249.0 | 2,022.4 | |

*Due to close in February 2012

Notes:

- Numbers may not cast due to rounding
- Final Annual Site Funding Limits issued in March 2012 may be adjusted to reflect efficiency performance and portfolio pressures. The NDA reserves the right to reallocate funding to meet prioritised programme needs.
- Dounreay figures may change as a result of competition outcome which may have a positive impact on the plan

| Summary NDA SR10 Funding | 2011/12 £ M | 2012/13 £ M | 2013/14 £ M | 2014/15 £ M |
|--------------------------|----------------|----------------|----------------|----------------|
| Income | 867 | 717 | 784 | 873 |
| Government funding | 2,022 | 2,249 | 2,215 | 2,146 |
| Expenditure | (2,889) | (2,966) | (2,999) | (3,019) |
| Net | 0 | 0 | 0 | 0 |

- 12/13 shows updated income forecast. 13/14 & 14/15 reflect SR10 settlement

2012/2013 Breakdown of Planned Non-site Expenditure

| Non site expenditure | 2012/13 Plan £ M | 2011/12 Plan £ M |
|---|------------------------|------------------------|
| NDA operating costs | 46.8 | 45.9 |
| Radioactive Waste Management Directorate | 19.7 | 23.7 |
| Socio Economic, Skills, R&D, Knowledge Management | 26.4 | 21.0 |
| Insurance | 12.0 | 12.0 |
| Pension administration costs | 1.0 | 1.0 |
| Contractor fees | 71.2 | 86.0 |
| Total | 177.1 | 189.6 |

2012/2013 Breakdown of Planned Income by Category

| Income Source | 2012/13 Plan £ M |
|---|------------------------|
| Reprocessing and fuel management services | 394.6 |
| Electricity Generation | 197.0 |
| NDA - INS Transport | 62.0 |
| Intra site services | 62.9 |
| Total | 716.5 |

Our Approach to Strategy and Delivery

Building on our experience, we continue to group our work under the following six strategic and delivery themes:

Site Restoration

- defines our approach to decommissioning and clean-up of redundant facilities and how we manage contamination in ground and groundwater. Restoration will drive our sites through a series of Interim States to a Site End State, at which point the NDA is able to release the site for other uses.

Spent Fuels

- defines our approach to managing the diverse range of spent nuclear fuels for which we have responsibility, including Magnox, oxide and exotic spent fuels.

Nuclear Materials

- defines our approach to dealing with the inventory of uranics and plutonium currently stored on some of our sites.

Integrated Waste Management

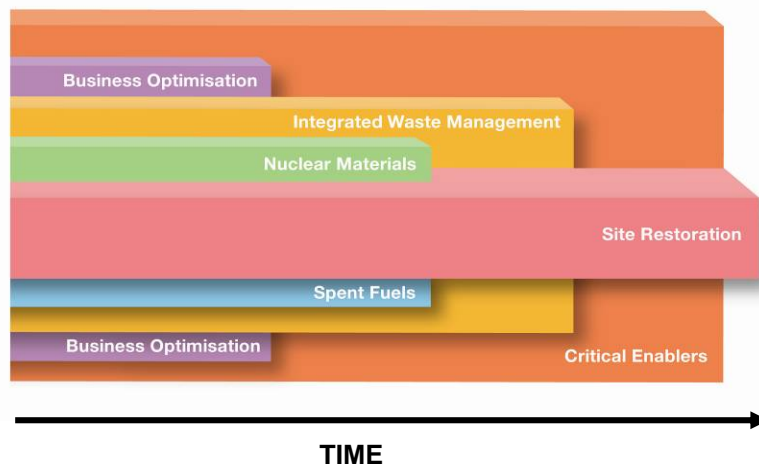
- considers how we manage all forms of waste arising from operating and decommissioning our sites.

Business Optimisation

- looks at how we maximise our commercial income, using our assets and capabilities to reduce the net cost of decommissioning and clean-up to the taxpayer.

Critical Enablers

- supports the overall delivery of our mission and, in some cases, reflects the supplementary duties assigned to the NDA by the Energy Act (2004) (ref 5). In most cases these are not matters in which we have the lead role, but where we need to take a view and ensure that appropriate action is being taken.



Delivery Activities within Strategic Themes

Site Restoration

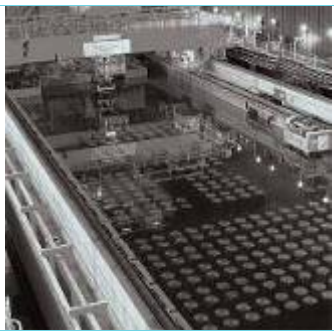


The objective of this theme is to restore our designated sites and release them for other uses.

Our priority is to remediate intolerable risks 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 State and take Harwell and Winfrith to site closure.

| Key deliverables for the year 2012/2013 are as follows: | |
|---|------------------------|
| First Generation Magnox Storage Pond – Commence retrieval of fuel from the pond floor | Sellafield |
| Pile Fuel Storage Pond – Continue removal of sludge from the pond floor | Sellafield |
| Completion of bulk asbestos removal from heat exchangers and turbine hall | Chapelcross |
| Complete bulk asbestos removal | Hinkley Point A |
| Programme optimisation including accelerated scenarios / options | RSRL / NDA |

Spent Fuels



The objective of this theme is to ensure safe, secure and cost-effective lifecycle management of spent fuels.

We will manage all spent Magnox fuel and place all exotic fuels into a final disposition form. We will continue to use up the existing fuel load at Wylfa. On oxide fuels, we will continue to receive and manage fuel from EDF Energy and seek to maximise value from our spent fuel management contracts.

| Key deliverables for the year 2012/2013 are as follows: | |
|---|------------------------------------|
| Progress milestones towards completion of out of reactor breeder fuel shipments to Sellafield | Dounreay |
| Receive the first batch of Dounreay Fast Reactor (DFR) Breeder fuel | Sellafield |
| Completion of reactor defuelling requirements in line with Magnox Operating Programme (MOP) (ref 6) | Chapelcross Dungeness A |
| Commencement of reactor defuelling in line with MOP | Oldbury |

Nuclear Materials



The objective of this theme is to ensure safe, secure and cost-effective lifecycle management of our nuclear materials.

| Key deliverables for the year 2012/2013 are as follows: | |
|---|-------------------|
| Work with Government on implementing any new policy regarding nuclear materials | NDA |
| Progress the capability to transfer materials off site | RSRL / NDA |

Integrated Waste Management



The objective of this theme is to ensure that wastes are managed in a manner that protects people and the environment, that comply with UK Government and Scottish Government policies providing value for money. The NDA has been given responsibility for planning and implementing geological disposal in accordance with UK Government policy. This is delivered through the Radioactive Waste Management Directorate.

| Key deliverables for the year 2012/2013 are as follows: | |
|--|----------------------|
| Continued delivery of Highly Active Liquor (HAL) stock reduction | Sellafield |
| Delivery of the Magnox and Low Level Waste Repository (LLWR) joint waste management plan for Low Level Waste (LLW) | Magnox / LLWR |
| Integrate transportation of waste with other programme moves | LLWR |
| Establish the Intermediate Level Waste (ILW) programme and co-location of materials | NDA |
| Optimise the Higher Activity Waste (HAW) programme | NDA |
| Commence Fuel Element Debris (FED) retrieval and dissolution | Bradwell |
| Complete transfer of legacy waste to the ILW store | Trawsfynydd |
| Continue with the construction of the new LLW Facility | Dounreay |

Business Optimisation



The objective of this theme is to create an environment where existing revenue can be secured, and opportunities can be developed against criteria agreed with UK Government and the Scottish Government.

Key deliverables for the year 2012/2013 are as follows:

| | |
|---|---------------|
| Explore synergies of new build activities adjacent to NDA sites through utilisation of existing assets where appropriate to reduce impact and costs | Magnox |
| Explore the opportunity for continued electricity generation beyond 2012 | Wylfa |
| Transition of the Capenhurst site and operations to URENCO | NDA |

Critical Enablers



The objective of this theme is to provide the stable and effective implementation framework that enables the delivery of our mission.

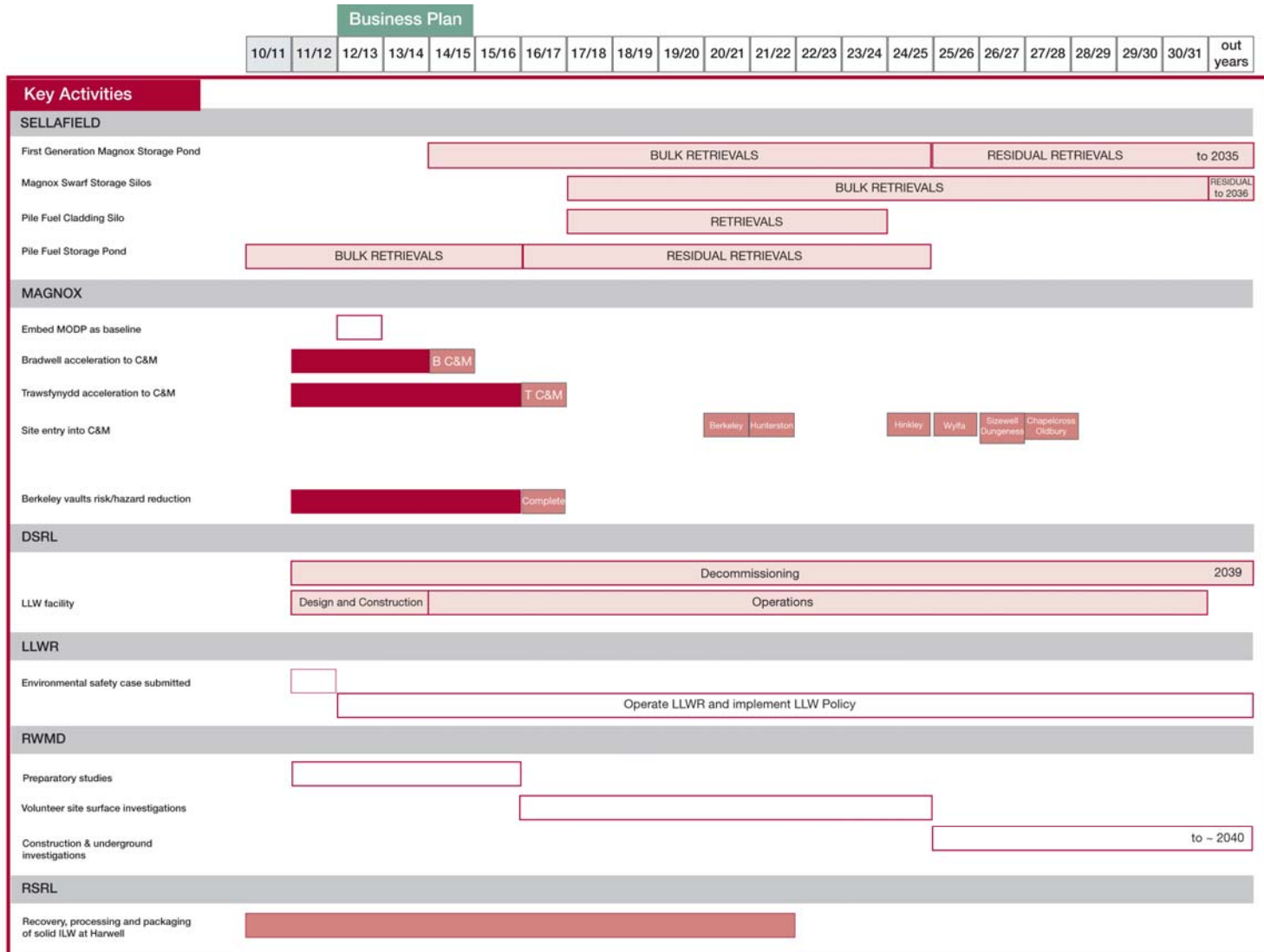
The NDA has a responsibility to deliver skills, Research & Development (R&D) and supply chain development, to consider the socio-economic aspects of its programme and maintain effective stakeholder engagement.

Key deliverables for the year 2012/2013 are as follows:

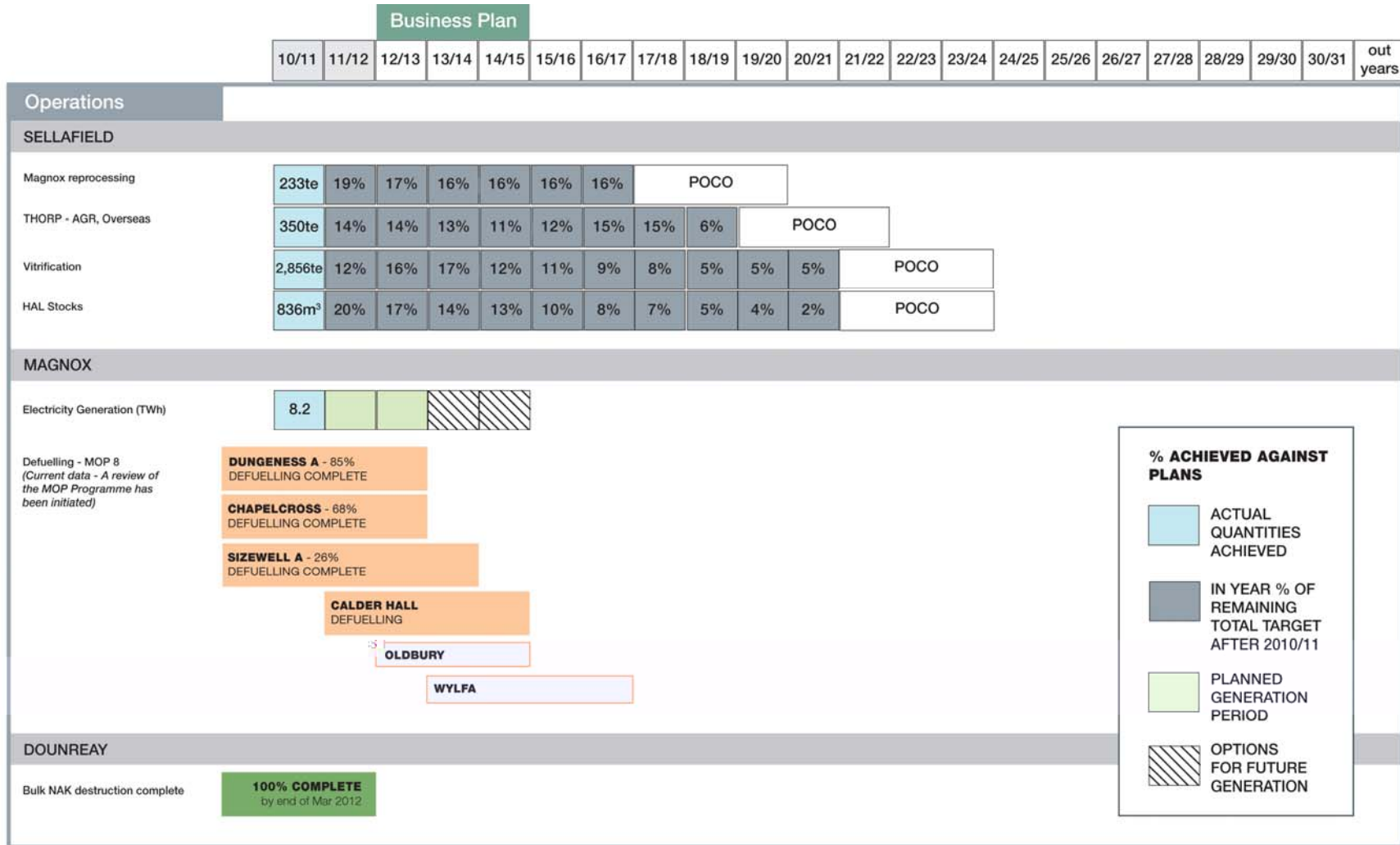
| | |
|---|--|
| Preparations for the Magnox and Research Sites Restoration Limited (RSRL) competitions | NDA / Magnox / RSRL |
| Achieve a 20% reduction in Support and Overhead Costs releasing revenues for decommissioning and clean-up | Sellafield / Magnox / RSRL / LLWR |
| Oversee the delivery of the Skills and People Strategy including the Transition Framework | All SLC's / NDA |
| Embed the new Dounreay Programme into NDA plans following competition | NDA |
| Evaluation of potential LLWR contract extension | NDA |

20 Year Overview

The following tables provide an overview of key activities and operations ongoing across our estate over the next 20 years drawn from current plans.

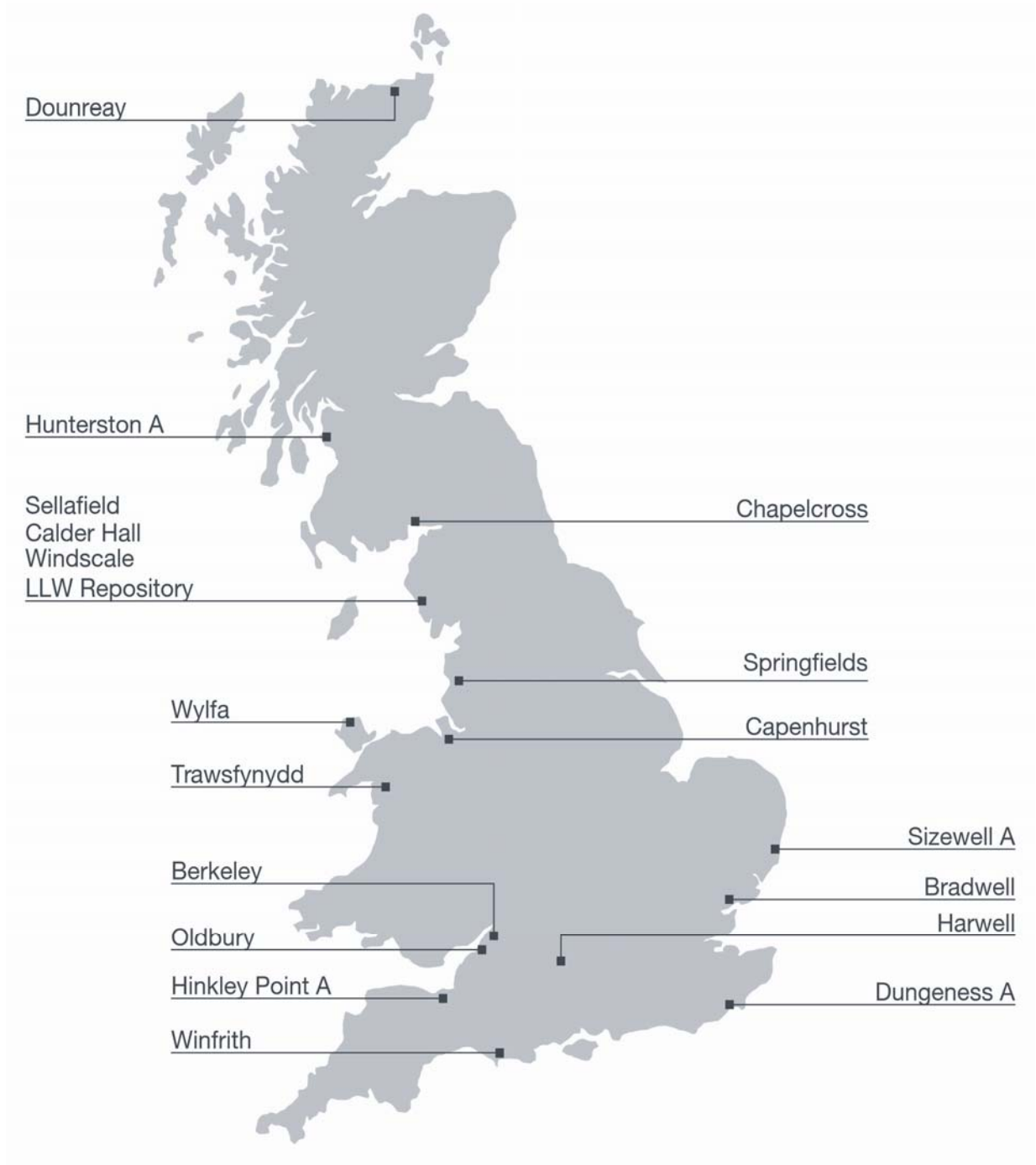


Nuclear Decommissioning Authority
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The percentages are indicative of the targets which the SLCs are expected to achieve enabling the plants to reach the stated POCO dates. Throughout the estate we are reliant on aged and fragile plant and infrastructure which means it is likely there will always be a balance between setting ourselves and our contractors challenging targets and some changes to the overall plan as we re-prioritise within our budget.


NDA Sites Location Map





The Six Site Licence Companies (SLCs)

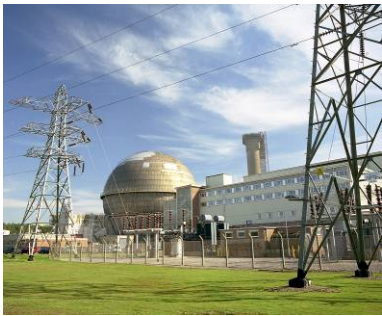
| | | |
|--|---|-----------------------|
|  <p>Sellafield Ltd</p> | <p>Parent Body Organisation Nuclear Management Partners Limited (NMPL) Consortia made up of URS, Areva and AMEC <i>PBO Website</i> – www.nuclearmanagementpartners.com <i>SLC Website</i> – www.sellafieldsites.com</p> | <p>Page 21</p> |
| <p>Sites - Sellafield (incl. Calder Hall), Windscale, Capenhurst</p> | | |
|  <p>Magnox</p> | <p>Parent Body Organisation EnergySolutions EU Ltd <i>PBO Website</i> – www.energysolutions.com <i>SLC Website</i> – www.magnoxsites.co.uk</p> | <p>Page 25</p> |
| <p>Sites - Berkeley, Bradwell, Chapelcross, Dungeness A, Hinkley Point A, Hunterston A, Oldbury, Sizewell A, Trawsfynydd, Wylfa</p> | | |
|  <p>Dounreay Site</p> | <p>Parent Body Organisation UKAEA Limited, a member of Babcock International Group (BIG) PLC <i>PBO Website</i> – www.babcock.co.uk <i>SLC Website</i> – www.dounreay.com</p> | <p>Page 38</p> |
| <p>Site - Dounreay</p> | | |
|  <p>Research Sites Restoration Ltd</p> | <p>Parent Body Organisation UKAEA Limited, a member of Babcock International Group (BIG) PLC <i>PBO Website</i> – www.babcock.co.uk <i>SLC Website</i> – www.research-sites.com</p> | <p>Page 40</p> |
| <p>Sites - Harwell and Winfrith</p> | | |
|  <p>LLWR Ltd</p> | <p>Parent Body Organisation UK Nuclear Waste Management Limited (UKNWM) Consortia made up of URS, Studsvik, Areva and Serco Assurance <i>SLC Website</i> – www.llwrsite.com</p> | <p>Page 42</p> |
| <p>Site - Low Level Waste Repository</p> | | |
|  <p>Springfields Fuels Ltd</p> | <p>Parent Company Westinghouse Electric UK Limited, which is part of the Toshiba Group</p> <p><i>Parent Company Website</i> – www.westinghousenuclear.com <i>SLC Website</i> – www.springfieldsfuels.com</p> | <p>Page 44</p> |
| <p>Site - Springfields</p> | | |

Site Summaries

| | |
|---|---|
| Sellafield Limited | |
|  | <p>Sellafield Limited is the SLC responsible for the operation of Sellafield (including Calder Hall), Capenhurst and Windscale nuclear licensed sites.</p> <hr/> <p>Planned expenditure for 2012/2013 - £1,630 million</p> |

| | |
|--|---|
| Sellafield (incl. Calder Hall) | <p>Location: Cumbria Area: 262 hectares</p> <p>Calder Hall Generation period: 1956 – 2003 Lifetime Output: 54 TWh Defuelling: Scheduled to complete 2014</p> <p>Current Key Milestones 2014/2015 – First Generation Magnox Storage Pond – start of sludge retrievals 2016 – Magnox reprocessing completed</p> <p>Status of land All 262 hectares covered by the nuclear site licence.</p> |
|  | |

| | |
|---|--|
| Capenhurst | |
|  | <p>Capenhurst is located near Ellesmere Port in Cheshire, adjacent to Urenco (the Uranium Enrichment Company), and has an area of 32 hectares covered by the nuclear site licence.</p> |

| | |
|---|---|
| Windscale | |
|  | <p>Location: Cumbria Area: 14 hectares</p> <p>Current Key Milestones 2030 – Windscale Pile 1 and 2 in Care and Maintenance with fuel and isotopes removed.</p> <p>Status of land All 14 hectares covered by the nuclear site licence.</p> |

2012 – 2013 Key Activities

Site Restoration

The areas of principal focus are the redundant Legacy Ponds and Silo facilities, made up from the First Generation Magnox Storage Pond, Magnox Swarf Storage Silo, Pile Fuel Cladding Silo and Pile Fuel Storage Pond. These facilities supported the development of the nuclear programme in the UK from the early 1950's and latterly with generation from the Magnox power station fleet and are now in need of clean-up and decommissioning. The programmes include; removal of nuclear fuel, sludges and solid material which require the provision of equipment to retrieve the various wastes and then treat and store them in passive conditions, acknowledging the role of Integrated Waste Management in achieving hazard reduction and long-term safety, security and environmental protection requirements.

The following activities are key steps in the delivery of these major clean-up programmes:

- Continue to retrieve and treat, for long-term storage, legacy flocculent from the flocculent storage tanks
- **First Generation Magnox Storage Pond**
 - complete construction of Sludge Packaging Plant 1 buffer storage facility
 - commence retrieval of fuel from pond floor
- **Pile Fuel Cladding Silo Programme**
 - complete construction of the superstructure to house the equipment needed to retrieve waste from the silo
 - complete Retrievals Access Penetration detailed design
- **Pile Fuel Storage Pond**
 - continue removal of sludge from the pond
 - removal of contaminated metal for treatment and storage
 - transfer of metal and oxide fuel from pond for storage
- **Magnox Swarf Storage Silo**
 - engage with Supply Chain to appoint a delivery partner for Silo Direct Encapsulation Plant
 - complete the Silo Emptying Plant assembly
 - complete seismic improvements on second extension
 - submit the Silo Direct Encapsulation Plant safety case approval
- **Capenhurst**
 - progress site integration into URENCO
 - continue to process uranic residues
- Progress removal of filter gallery from Windscale Chimney Pile 1

Spent Fuels

The site remains critical to support the ongoing activities at the UK's operational reactors and decommissioning sites, for the safe receipt, storage and processing of used nuclear fuels and in support of overseas customers. The Magnox and Oxide Fuels Programmes will continue to receive shipments whilst major enabling programmes such as the construction of the new Evaporator D are underway.

The following activities highlight the key steps:

- Continue to reprocess Magnox Fuel in line with the MOP
- Receive the first batch of DFR Breeder fuel at Sellafield
- Delivery of the MOP (ref 6) – receive Spent Fuel deliveries from Magnox for interim storage pending reprocessing

| |
|---|
| <ul style="list-style-type: none"> • Continue to receive Advanced Gas Reactor (AGR) fuel from EDF |
| <ul style="list-style-type: none"> • Continue to reprocess oxide fuel through Thermal Oxide Reprocessing Plant (THORP) from EDF and overseas customers |
| <ul style="list-style-type: none"> • AGR Programme - ongoing waste treatment activities |

Nuclear Materials

Sellafield is the custodian of the majority of the UK's stock of plutonium and its safe secure storage is of the utmost priority. Consolidation of materials is an ongoing activity and will continue to be part of the sites mission.

The following activities highlight the key steps:

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| <ul style="list-style-type: none"> • Continue the safe and secure storage of plutonium in line with UK Policy |
| <ul style="list-style-type: none"> • Explore the consolidation of materials across NDA estate with RSRL |

Integrated Waste Management

The various activities of the site produce wastes in many forms. This requires varying degrees of treatment and onward processing. The site will continue to focus on safe, efficient management of these wastes from reducing the stocks of Highly Active Liquor (HAL) which are produced as part of the reprocessing operations, to returning vitrified material overseas and management of on-site intermediate and low level wastes

The following activities highlight the key steps:

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| <ul style="list-style-type: none"> • Continued delivery of HAL stock reduction |
| <ul style="list-style-type: none"> • Continue to process HAL through the Waste Vitrification Plant |
| <ul style="list-style-type: none"> • Continue to repatriate overseas owned vitrified HAL to country of origin |
| <ul style="list-style-type: none"> • Continue to transfer legacy Plutonium Contaminated Material (PCM) to modern engineered stores |
| <ul style="list-style-type: none"> • Continue the LLW waste treatment activities to support both commercial operations and decommissioning |
| <ul style="list-style-type: none"> • Continue to receive further module deliveries for the construction of Evaporator D |

Critical Enablers

A number of key enabling activities require specific focus which range from infrastructure refurbishment or replacement projects through to key change programmes which aim to improve operational delivery and efficiency on the site.

The following activities highlight the key steps:

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| <ul style="list-style-type: none"> • Complete handover of the boiler park from Sellafield to Fellside |
| <ul style="list-style-type: none"> • Complete handover of refurbished Grid Transfers |
| <ul style="list-style-type: none"> • Continue the Sellafield infrastructure enhancement programme |
| <ul style="list-style-type: none"> • Implementation of the focus areas of the Integrated Change Programme (ICP) across all operating units |
| <ul style="list-style-type: none"> • Achieve a 20% reduction in support and overhead costs releasing revenues for decommissioning and clean-up |

2012 – 2013 Regulatory Matters

- Regulatory support to progress the development plans for DFR and consolidation of nuclear materials
- Continued development of an improved process for monitoring progress against decommissioning milestones
- Continued delivery of HAL stock reduction
- Embedding the Safety Improvement Programme for the Leased Operations Facilities
- Development of Capenhurst site in line with the NDA's Strategy
- Delivery of uranium hexafluoride management plan

2013 – 2015 Planned Key Activities

Site Restoration

- Start retrievals from First Generation Magnox Storage Pond
- Continue to retrieve and treat legacy flocculent from the flocculent storage tanks
- Preparation for materials from legacy facilities

Spent Fuels

- Continue to reprocess Magnox fuel
- Deliver the ongoing waste treatment activities in the AGR Programme
- Continue to reprocess oxide fuel through THORP from EDF and overseas customers
- Continue to receive AGR fuel from EDF
- Evaporator D inactive commissioning complete

Nuclear Materials


- Continue the safe and secure storage of plutonium in line with current UK policy

Integrated Waste Management

- Continued delivery of HAL stock reduction
- Continue to process HAL through the Waste Vitrification Plant
- Continue to repatriate overseas owned vitrified HAL to country of origin
- Diversion of materials from LLWR in line with the LLW Strategy implementation and optimisation

Critical Enablers

- Continued delivery of the Integrated Change Programme (ICP) to enhance performance

| Magnox Limited | |
|---|---|
|  | <p>Magnox Limited is the SLC responsible for the operation of the Berkeley, Bradwell, Chapelcross, Dungeness A, Hinkley Point A, Hunterston A, Oldbury, Sizewell A, Trawsfynydd and Wylfa sites.</p> <p>The current PBO of the company is EnergySolutions EU Ltd.</p> |
| <p>Planned expenditure for 2012/2013 - £641 million</p> | |

The NDA requires Magnox SLC to manage the generation, defuelling, preparations to enter Care and Maintenance, the Care and Maintenance phase and final site clearance of the Magnox Reactor Fleet. The key activities are maintaining safety and security at all sites and managing the environmental impact of activities which include:

- Electricity Generation at Wylfa and Maentwrog
- Defuelling at Chapelcross, Dungeness A, Sizewell A and Oldbury
- Accelerated decommissioning at Bradwell and Trawsfynydd
- Decommissioning and demolition of facilities at Hunterston A, Berkeley and Hinkley Point A

These activities are combined into the Magnox Optimised Decommissioning Programme (MODP) (*ref 7*) which uses the ‘lead and learn’ concept to drive value for competition. All decommissioning work to Care and Maintenance has been organised nationally into four programmes utilising new approaches and innovations which will not only reduce costs in excess of £1 billion but shorten programmes by an aggregate of greater than 30 years. The experience of work and learning on ‘lead’ sites can then be rolled out to the rest of the sites over time.

Please note – when reading the Magnox section all dates are in line with MOP8 Rev 2. The MOP programme is currently under review and a revised version will be published in May 2012.

| 2012 – 2013 Overarching Magnox Key Activities |
|---|
| Spent Fuels |
| <ul style="list-style-type: none"> • Management of the Magnox Operating Programme (MOP) (<i>ref 6</i>) and co-ordination of Magnox fuel management activities with Sellafield and Dounreay |
| Integrated Waste Management |
| <ul style="list-style-type: none"> • Delivery of the Magnox and LLWR joint waste management plan for LLW |
| Business Optimisation |
| <ul style="list-style-type: none"> • Seek to optimise electricity generation at Wylfa • Explore synergies of new build activities adjacent to NDA sites through utilisation of existing assets where appropriate to reduce impact and costs |
| Critical Enablers |
| <ul style="list-style-type: none"> • Provide support to the NDA in competition for the PBO • Establish the ‘lead and learn’ principle and focus on building a delivery organisation. • Execute and continuously improve delivery of the MODP |

- Embed a Programme Delivery Organisation across the Magnox estate and drive value through implementation of best practice
- Achieve a 20% reduction in support and overhead costs releasing revenues for decommissioning and clean-up

2012 – 2013 Regulatory Matters

- NDA and regulatory concurrence with the Care and Maintenance entry definitions and arrangements

2013 – 2015 Planned Key Activities

Site Restoration

- Bradwell into effective Care and Maintenance

Spent Fuels

- Management of the MOP and co-ordination of Magnox fuel management activities with Sellafield and Dounreay

Integrated Waste Management


- Delivery of the Magnox and LLWR joint waste management plan

Business Optimisation

- Work to minimise environmental impact of new build activities adjacent to NDA sites through utilisation of existing assets where appropriate
- Seek to optimise electricity generation at Wylfa

Critical Enablers

- Embed the optimised plan for decommissioning the Magnox generation of nuclear power plants
- Establish the 'lead and learn' principle and focus on building a delivery organisation
- Seek to optimise staff transition and maintain capability
- Build and develop UK Nuclear Decommissioning skill base

| | |
|---|--|
| Berkeley | <p>Location: Gloucestershire Area: 27 hectares Generation period: 1962 – 1989 Lifetime output: 43 TWh Defuelling: Completed 1992</p> <p>Current Key Milestones 2021 – Site enters Care and Maintenance 2070 – Final site clearance commences 2079 – Final site clearance achieved</p> <p>Status of land <i>De-licensed:</i> 8.09 hectares (20 acres) approximately 30% of the nuclear licensed land. <i>De-designation:</i> Area of land planned to be de-designated in 2012 subject to Ministerial approval.</p> |
|  | |

2012 – 2013 Key Activities

Integrated Waste Management

- Continue active waste vaults retrieval
- Continue retrieval and packaging of other ILW wastes

2012 – 2013 Regulatory Matters

- Concurrence for use of Ductile Cast Iron Containers (DCICs) for the Berkeley ILW management programme


2013 – 2015 Planned Key Activities

Site Restoration

- Complete despatch of boilers from site for recycling and disposal
- Complete bulk retrievals from the chute silo

Integrated Waste Management

- Continued active waste vaults retrievals
- Continued ILW plant retrievals and packaging

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|---|---|
| Bradwell | <p>Location: Essex Area: 20 hectares Generation period: 1962 – 2002 Lifetime output: 60 TWh Defuelling: Completed 2005</p> <p>Current Key Milestones 2015 – Site enters Care and Maintenance 2083 – Final site clearance commences 2092 – Final site clearance achieved</p> <p>Status of land All 20 hectares remain covered by the nuclear site licence.</p> |
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2012 – 2013 Key Activities

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| Site Restoration |
| <ul style="list-style-type: none"> • Continued pilecap de-plant • Ponds centre bay drained and stabilised • Dessicant retrieval complete |

Integrated Waste Management

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| <ul style="list-style-type: none"> • Commence FED retrieval and dissolution • Complete active commissioning of aqueous discharge abatement plant |
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Critical Enablers

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| <ul style="list-style-type: none"> • Capture lessons learned for application to other Magnox sites (lead and learn) |
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2012 – 2013 Regulatory Matters


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| <ul style="list-style-type: none"> • Regulatory concurrence to Care & Maintenance entry definition and arrangements |
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2013 – 2015 Planned Key Activities

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| Site Restoration |
| <ul style="list-style-type: none"> • Site into effective Care and Maintenance • Complete pilecap de-plant and equipment removal • Ponds building/complex modifications completed for Care and Maintenance entry • Complete Reactor Building de-plant and demolition activities • Reactor building cladding and safe-store completed • Site completes physical activities to enable Care and Maintenance entry • Site submits all required safety cases to the regulators to facilitate entry to the Care and Maintenance phase |

Integrated Waste Management

- Completion of FED retrievals and dissolution
- Complete ILW retrieval and storage activities

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| Chapelcross | <p>Location: Dumfries & Galloway Area: 96 hectares Generation period: 1959 – 2004 Lifetime output: 60 TWh Defuelling: Scheduled to complete 2012</p> <p>Current Key Milestones 2017 – 2023 – Interim Care and Maintenance 2028 – Site enters Care and Maintenance 2089 – Final site clearance commences 2095 – Final site clearance achieved</p> <p>Status of land All 96 hectares remain covered by the nuclear site licence.</p> |
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| 2012 – 2013 Key Activities |
| Site Restoration |
| <ul style="list-style-type: none"> • Completion of bulk asbestos removal from heat exchangers and turbine hall • Continued hazard reduction activities towards interim Care and Maintenance |

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| Spent Fuels |
| <ul style="list-style-type: none"> • Completion of reactor defuelling requirements in line with MOP |

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| 2012 – 2013 Regulatory Matters |
| <ul style="list-style-type: none"> • Site fuel free verification agreed with the Office for Nuclear Regulation (ONR) |

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| 2013 – 2015 Planned Key Activities |
| Site Restoration |
| <ul style="list-style-type: none"> • Continued hazard reduction activities towards interim Care and Maintenance preparations • Complete the drainage and stabilising of Pond 2 |

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| Integrated Waste Management |
| <ul style="list-style-type: none"> • All reactor desiccant retrieved and packaged • All pond equipment and ILW resin retrieved and packaged |

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| Dungeness A | <p>Location: Kent Area: 20 hectares Generation period: 1965 – 2006 Lifetime output: 120 TWh Defuelling: Scheduled to complete 2012</p> <p>Current Key Milestones 2019 – 2023 – Interim Care and Maintenance 2027 – Site enters Care and Maintenance 2087 – Final site clearance commences 2097 – Final site clearance achieved</p> <p>Status of land All 20 hectares remain covered by the nuclear site licence.</p> |
|--------------------|--|

2012 – 2013 Key Activities

Site Restoration

- Continued hazard reduction activities towards interim Care and Maintenance

Spent Fuels

- Completion of reactor defuelling requirements in line with MOP

Integrated Waste Management

- Complete retrieval and processing of LLW sludge

2012 – 2013 Regulatory Matters

- Site fuel free verification agreed with the ONR

2013 – 2015 Planned Key Activities

Site Restoration


- Continued hazard reduction activities towards interim Care and Maintenance
- Commence boiler house thermal insulation removal

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|------------------------|---|
| Hinkley Point A | <p>Location: Somerset Area: 19 hectares Generation period: 1965 – 2000 Lifetime output: 103 TWh Defuelling: Completed 2004</p> <p>Current Key Milestones 2025 – Site enters Care and Maintenance 2080 – Final site clearance commences 2090 – Final site clearance achieved</p> <p>Status of land All 19 hectares remain covered by the nuclear site licence.</p> |
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| 2012 – 2013 Key Activities |
| Site Restoration |
| <ul style="list-style-type: none"> • Complete bulk asbestos removal |

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| 2013 – 2015 Planned Key Activities |
| Site Restoration |
| <ul style="list-style-type: none"> • Complete ponds drain and stabilise surface |

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| Integrated Waste Management |
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| Hunterston A | <p>Location: Ayrshire Area: 15 hectares Generation period: 1964 – 1989 Lifetime output: 57 TWh Defuelling: Completed 1995</p> <p>Current Key Milestones 2022 – Site enters Care and Maintenance 2070 – Final site clearance commences 2080 – Final site clearance achieved</p> <p>Status of land All 15 hectares remain covered by the nuclear site licence.</p> |
|  | |

2012 – 2013 Key Activities

Site Restoration

- Pond dewatering and drainage ongoing

Integrated Waste Management

- Continued development and optimisation of solid ILW Management programme
- Commence ILW wet retrieval plant commissioning

2013 – 2015 Planned Key Activities

Site Restoration

- Complete the ponds drain and stabilise surface

Integrated Waste Management

- Continue ILW management programme

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| <p>Oldbury</p> | <p>Location: South Gloucestershire Area: 51 hectares Generation period: 1967 – scheduled to end 2012 Lifetime output: over 124 TWh Defuelling: Scheduled to complete 2014</p> <p>Current Key Milestones 2027 – Site enters Care and Maintenance 2092 – Final site clearance commences 2101 – Final site clearance achieved</p> <p>Status of land <i>De-licensed:</i> 35 hectares (120 acres) approximately 69% of the nuclear licensed land. <i>De-designation:</i> Area of land planned to be de-designated in 2012 subject to Ministerial approval.</p> |
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2012 – 2013 Key Activities

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| Sizewell A | <p>Location: Suffolk Area: 14 hectares Generation period: 1966 – 2006 Lifetime output: 110 TWh Defuelling: Scheduled to complete 2013</p> <p>Current Key Milestones 2027 – Site enters Care and Maintenance 2088 – Final site clearance commences 2098 – Final site clearance achieved</p> <p>Status of land All 14 hectares remain covered by the nuclear site licence.</p> |
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| 2012 – 2013 Key Activities |
| Site Restoration |
| <ul style="list-style-type: none"> • Maintain facilities in a safe state |

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| Spent Fuels |
| <ul style="list-style-type: none"> • Continue defuelling in line with MOP |

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| 2013 – 2015 Planned Key Activities |
| Spent Fuels |
| <ul style="list-style-type: none"> • Complete defuelling in line with MOP • Site fuel free verification agreed with the ONR |

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|--------------------|---|
| Trawsfynydd | <p>Location: Gwynedd, North Wales Area: 15 hectares Generation period: 1965 – 1991 Lifetime output: 72 TWh Defuelling: Completed 1995</p> <p>Current Key Milestones 2016 – Site enters Care and Maintenance 2027 – Safestore completed 2073 – Final site clearance commences 2083 – Final site clearance achieved</p> <p>Status of land All 15 hectares remain covered by the nuclear site licence.</p> |
|--------------------|---|



2012 – 2013 Key Activities

Site Restoration

- Continue safe-store asset care activities to support Care and Maintenance entry
- Complete the strengthening of the capping roof
- Complete North Lane Pond scabbling
- Completion of North FED civil enabling works
- Combined sludge and resin vault retrievals

Integrated Waste Management

- Complete transfer of legacy waste to the ILW store

Critical Enablers

- Review the opportunity for personnel and skills transfer between Trawsfynydd, Wylfa and potential new build on Anglesey
- Capture lessons learned for application to other Magnox sites (lead and learn)


2013 – 2015 Planned Key Activities

Site Restoration

- Complete bulk retrievals for the main sludge and resin vaults 2 & 3
- Continue safe-store asset care activities to support Care and Maintenance entry
- All pond lanes scabbling activities completed

Integrated Waste Management

- Commence retrieval and encapsulation of FED
- Active waste vaults – complete the ILW solid retrievals and processing
- Complete transfer of legacy drums to the ILW store

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| Wylfa | |
|  | <p>Location: Anglesey Area: 21 hectares Generation period: 1971 – currently scheduled to end 2012 (extension to be explored) Lifetime output: over 220 TWh Defuelling: Scheduled to complete 2016</p> <p>Current Key Milestones 2025 – Site enters Care and Maintenance 2091 – Final site clearance commences 2101 – Final site clearance achieved</p> <p>Status of land All 21 hectares remain covered by the nuclear site licence.</p> |

2012 – 2013 Key Activities

Spent Fuels

- Completion of secondary fuel route project for defuelling

Business Optimisation

- Explore the opportunity for continued electricity generation beyond December 2012

2012 – 2013 Regulatory Matters

- Regulatory consent for continued operation of Wylfa using Inter-Reactor Exchange

2013 – 2015 Planned Key Activities

Site Restoration

- Preparations for decommissioning and hazard reduction

Spent Fuels


- Commencement of reactor bulk defuelling in line with the MOP


Critical Enablers

- Commencement of the organisational change programme for decommissioning

Business Optimisation

- Continued generation at Maentwrog

| Dounreay Site Restoration Limited | |
|---|---|
|  | <p>Dounreay Site Restoration Limited (DSRL) is the SLC responsible for the operation of the Dounreay site. The current PBO of the company is UKAEA Ltd, which is owned by Babcock International Group (BIG) Plc.</p> <p>Planned expenditure for 2011/2012 - £161 million</p> |

| Dounreay | <p>Location: Caithness, Scotland Established: 1955 Area: 74 hectares</p> <p>Current Key Milestones 2014 – LLW facilities commence operations 2029 – All Sodium Potassium (NaK) residues removed from reactors 2032 – All ILW removed from shaft 2034 – Prototype Fast Reactor (PFR) facility decommissioning complete 2039 – Interim State achieved</p> <p>Status of land All 74 hectares remain covered by the nuclear site licence.</p> |
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| 2012 – 2013 Key Activities |
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| Site Restoration |
| <ul style="list-style-type: none"> • Ongoing destruction of sodium wetted components from decommissioning • Complete the landfill 42 Closure Cap Project • Continue removal of spent fuel cans stored in the PFR buffer store |

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| Spent Fuels |
| <ul style="list-style-type: none"> • Progress milestones towards completion of out of reactor breeder fuel shipments to Sellafield • Complete the removal of fuel from PFR Reprocessing Plant |

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| Integrated Waste Management |
| <ul style="list-style-type: none"> • Continue with the construction of the new LLW Facility |

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| Critical Enablers |
| <ul style="list-style-type: none"> • Complete commissioning of equipment to remove breeder fuel from the DFR |
| <ul style="list-style-type: none"> • Complete the new PBO baseline update to reflect the winning decommissioning strategy |
| <ul style="list-style-type: none"> • Complete the design for an Un-irradiated Fuels Characterisation Facility to assay and package un-irradiated fuels for final disposition |
| <ul style="list-style-type: none"> • Implementation of the socio-economic and stakeholder engagement plans |

2013 – 2015 Planned Key Activities

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| Site Restoration |
| <ul style="list-style-type: none"> • Complete removal of drum alignment posts, decontaminate and prepare Drum Store for demolition |
| <ul style="list-style-type: none"> • Complete demolition of Post Irradiation Facility to floor slab |


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| Spent Fuels |
| <ul style="list-style-type: none"> • Complete dispatch of final 'Out of Reactor' breeder flask shipments to Sellafield |
| <ul style="list-style-type: none"> • Complete removal of spent fuel cans stored in the PFR buffer store |

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| Nuclear Materials |
| <ul style="list-style-type: none"> • Complete Commissioning of Unirradiated Fuels Characterisation Facility to enable conditioning of nuclear materials for potential export |

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| Integrated Waste Management |
| <ul style="list-style-type: none"> • Complete encapsulation of highly active Material Test Reactor liquors in cement |
| <ul style="list-style-type: none"> • Continue with the construction of the new LLW Facility |


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| Critical Enablers |
| <ul style="list-style-type: none"> • Complete the design and construction of the New Active Analysis Laboratory |

The output of the competition is expected to positively impact the plan. Any short-term changes in activities will be noted in the final Business Plan issued in March 2012.

| Research Sites Restoration Limited (SLC) | |
|---|--|
|  | <p>In February 2009 RSRL became the SLC responsible for the operation of the Harwell and Winfrith sites. The current PBO of the company is UKAEA Ltd, which is owned by Babcock International Group (BIG) Plc.</p> |
| | <p>Planned expenditure for 2012/2013 - £60 million</p> |

| 2012 – 2013 Key Activities |
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| <p>Site Restoration</p> |
| <ul style="list-style-type: none"> • Development of programme optimisation including accelerated scenarios / options |

| Critical Enablers |
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| <ul style="list-style-type: none"> • Provide support to the NDA in the competition for a new PBO |
| <ul style="list-style-type: none"> • Development of optimised decommissioning plan options |
| <ul style="list-style-type: none"> • Achieve a 20% reduction in support and overhead costs releasing revenues for decommissioning and clean-up |

| Harwell | <p>Location: Oxfordshire Established: 1946 Area: 110 hectares</p> <p>Current Key Milestones 2023 – Primary facilities decommissioning complete 2031 – Reactor decommissioning complete 2032 – Site closure phase begins 2064 – Final site clearance achieved</p> <p>Status of land <i>De-licensed:</i> 8.09 hectares (20 acres) approximately 7% of the nuclear licensed land. <i>De-designation:</i> Area of land planned to be de-designated in 2012 subject to Ministerial approval.</p> |
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| 2012 – 2013 Key Activities |
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| <p>Site Restoration</p> |
| <ul style="list-style-type: none"> • Care and Maintenance of redundant reactors and other facilities |
| <ul style="list-style-type: none"> • Decommissioning of Liquid Effluent Treatment Plant (LETP) |


| Integrated Waste Management |
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| <ul style="list-style-type: none"> • Recovery, processing and packaging of solid ILW |

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| Nuclear Materials |
| <ul style="list-style-type: none"> • Progress the capability to transfer materials off site |

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|--|
| 2013 – 2015 Planned Key Activities |
| Site Restoration |
| <ul style="list-style-type: none"> • Care and Maintenance of redundant reactors and other facilities • Decommissioning of LETP |


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| Nuclear Materials |
| <ul style="list-style-type: none"> • Meeting the programme milestones for the transfer of nuclear materials |


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| Integrated Waste Management |
| <ul style="list-style-type: none"> • Recovery, processing and packaging of solid ILW |

| | |
|---|---|
| Winfrith | <p>Location: Dorset Established: 1958 Area: 88 hectares</p> <p>Current Key Milestones 2021 – Complete Care and Maintenance 2032 – DRAGON reactor complex decommissioning complete 2038 – Steam Generating Heavy Water Reactor complex decommissioning complete 2048 – Final site clearance achieved</p> <p>Status of land All 88 hectares remain covered by the nuclear site licence.</p> |
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| 2012 – 2013 Key Activities |
| Site Restoration |
| <ul style="list-style-type: none"> • Prepare Winfrith for Interim State in a safe and secure manner and review opportunities for optimisation |

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| 2013 – 2015 Planned Key Activities |
| Site Restoration |
| <ul style="list-style-type: none"> • Prepare Winfrith for Interim State |

| Low Level Waste Repository Limited | |
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|  | <p>Low Level Waste Repository (LLWR) Limited is the SLC responsible for the operation of the Low Level Waste site near the village of Drigg in Cumbria. The PBO of the company is UK Nuclear Waste Management Limited.</p> |
| <p>Planned expenditure for 2012/2013 - £30 million</p> | |

| LLWR | <p>Location: Cumbria Established: 1959 Area: 109 hectares</p> <p>Current Key Milestones 2018 – PCM facilities removal complete 2007 - 2055 – Engineered vaults construction 2080 – Final site clearance achieved</p> <p>Status of land All 109 hectares remain covered by the nuclear site licence.</p> |
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| 2012 – 2013 Key Activities |
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| Site Restoration |
| <ul style="list-style-type: none"> • Commence site preparation for phased construction of final cap • Ongoing decommissioning of PCM facilities • Ongoing implementation of the Environmental Safety Case |

| 2012 – 2013 Key Activities |
|---|
| Integrated Waste Management |
| <ul style="list-style-type: none"> • Continue segregated waste and disposal services • Work with consigning SLCs to further implement the LLW Strategy • Operation of new LLW packaging containers • Integrate transportation of waste with other programme moves • Commence phased implementation of the Environmental Safety Case • Decommissioning of PCM facilities • Delivery of the National Waste Programme to optimise LLW Strategy Implementation |

Critical Enablers

- Achieve a 20% reduction in support and overhead costs releasing revenues for decommissioning and clean-up

2012 – 2013 Regulatory Matters

- Demonstrate Conduct of Operations and Maintenance Improvements to ONR
- Support Environment Agency assessment of Environmental Safety Case
- Determination of the Site Optimisation and Closure Works Planning Application

2013 – 2015 Planned Key Activities

Integrated Waste Management

- Waste treatment and disposal in line with UK LLW Strategy
- Operational capabilities in place for the estate-wide management of LLW, informed by waste management hierarchy principles
- Implementation of the LLW Strategy and improved waste forecasts
- Secure continued operation and capacity of LLWR by demonstrating to the planning authorities that disposal volumes can be minimised
- Maintain the momentum of the supply chain investment in waste treatment arrangements

| Springfields Fuels Limited | |
|---|--|
|  | <p>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 and decommissions historic uranic residues and redundant facilities.</p> <p>From April 2010, the NDA permanently transferred ownership of the company to Westinghouse Electric including the freedom to invest for the future under the terms of a new 150 year lease. The deal supports the maintenance of high-quality jobs that would otherwise have been gradually shed as commercial operations declined and decommissioning progressed.</p> |
| Planned expenditure for 2012/2013 - £42 million | |

2012 – 2013 Key Activities

Site Restoration

- Continue the Post Operational Clean Out (POCO) and decommissioning of redundant areas

Nuclear Materials

- Processing historic residues to recover uranium to return to the nuclear fuel cycle

2013 – 2015 Planned Key Activities

Site Restoration

- Continue the POCO and decommissioning of redundant areas

Nuclear Materials

- Continue to clear uranic residues in the uranium recovery plants

NDA and RWMD

Nuclear Decommissioning Authority

The Energy Act (2004) (ref 5) transferred the assets and liabilities of all the sites included in this Business Plan to the NDA. The NDA has six offices located across the UK with its headquarters in Cumbria. The NDA acts as a strategic authority.

The delivery of the NDA's mission is primarily through the SLC's. The NDA's role is:

- **Strategy** – development, long-term scenario planning and options development
- **Planning** – securing and allocation of funding, development of plans and options
- **Incentivisation** – designing and implementing the right incentivisation principles and processes to achieve the required outcomes
- **Sanctioning** – sanctioning of major programmes and projects and post investment appraisal
- **Performance Management** – deep dive assurance reviews, performance monitoring, performance and financial reporting

2012 – 2013 Key Activities

Site Restoration

- Prioritisation of funding for high risk and hazard legacy wastes
- Programme optimisation including accelerated scenarios / options

Nuclear Materials

- Work with Government on implementing any new policy regarding nuclear material
- Progress the capability to transfer materials between sites

Integrated Waste Management

- Establish with the SLCs the ILW programme including co-location potential
- Focus on the Higher Activity Waste (HAW) programme

Business Optimisation

- Evaluation of potential LLWR contract extension
- Capenhurst – Transition of the Capenhurst site and operations to URENCO

Critical Enablers

- Initiate the Records Management project to ensure NDA are compliant in storing and restoring documents
- Re-certification of ISO9001/14001
- Deliver savings from collaborative procurement across the estate
- Preparations for the Magnox & RSRL competitions

| |
|---|
| <ul style="list-style-type: none"> Improving Risk Management throughout the estate |
| <ul style="list-style-type: none"> Embed new programme and project reporting |
| <ul style="list-style-type: none"> Oversee the delivery of the Skills and People Strategy including the Transition Framework |
| <ul style="list-style-type: none"> Embed the new Dounreay Programme into NDA plans following competition |

2013 – 2015 Planned Key Activities

Critical Enablers

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| <ul style="list-style-type: none"> Begin preparations for the next Strategy |
| <ul style="list-style-type: none"> Begin preparations for the next Spending Review |

Radioactive Waste Management Directorate (RWMD)

Government has made the NDA the implementing organisation for geological disposal of HAW, this includes both planning and delivery. RWMD is currently running this programme and 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.

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

- develop the specification, design, safety case and environmental and sustainability assessments for the disposal system and obtain regulatory support
- deliver a focused R&D programme to support geological disposal and optimised packaging solutions
- in conjunction with waste producers, identify and deliver solutions to optimise the management of HAW
- deliver sustainable, innovative and cost-effective solutions that have public support and are in the best interests of the UK
- engage with national and local Governments and communities to identify a Geological Disposal Facility (GDF) site
- obtain and maintain stakeholder support for our activities
- develop and maintain an effective organisation and secure resources to deliver the GDF programme

2012 – 2013 Key Activities

Integrated Waste Management

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|--|
| <ul style="list-style-type: none"> Utilising the improved Letters of Compliance (LoC) process (to be agreed in March 2012) work pro-actively with waste producers in developing disposability assessments for their range of wastes |
| <ul style="list-style-type: none"> Working with stakeholders, finalise potential candidate site identification and assessment methodologies |
| <ul style="list-style-type: none"> Support community activities to identify potential candidate sites |
| <ul style="list-style-type: none"> Deliver a robust R&D programme to address uncertainties in the generic Disposal System Safety Case (DSSC) |
| <ul style="list-style-type: none"> Establish a GDF users' group to ensure non NDA disposal requirements are fully understood |
| <ul style="list-style-type: none"> Continue work on GDF programme acceleration and prepare a revised baseline programme |
| <ul style="list-style-type: none"> Progress the ability to become a wholly owned subsidiary of the NDA when appropriate |

2012 – 2013 Regulatory Matters

- RWMD will continue to be subject to voluntary scrutiny by the regulators as a 'Prospective SLC'
- RWMD will work with the regulators to agree plans for transition to a regulated body including agreement on a timeframe to form a subsidiary
- RWMD will implement and operate improvements to the LoC process to support regulators' guidance on radioactive waste management

2013 – 2015 Planned Key Activities

Integrated Waste Management

- Support community activities to identify potential candidate sites
- Support community activities to develop and apply the site assessment process
- Carry out a Strategic Environmental Assessment (SEA) and a (plan level) Habitats Regulations Assessment
- Carry out site evaluations on potential candidate sites
- Commence preparation of desk based assessment reports
- Deliver a needs-based research and development programme to address issues arising from the 2010 generic DSSC
- Identify and secure resources needed for Managing Radioactive Waste Safely (MRWS) Stage 5

NDA Subsidiary Companies

The NDA has a number of subsidiary companies to manage a range of business interests. The following section described 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 service for the transportation of Nuclear Material. As part of a broader portfolio including Commercial Freight, 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.

2012 – 2015 Planned 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
- Focus on developing business opportunities in the following sectors:
 - NDA Estate Support
 - Port Intermodal
 - Major Construction Projects
- Maximise asset utilisation in the recent investment in lowliner wagons
- Continue to identify new business opportunities in the following areas:
 - Domestic Intermodal
 - Specialist Freight
 - Network Rail Infrastructure Support
 - Passenger Operations
 - Third Party Maintenance
 - Resource Hire
- Continue to develop a robust marketing and communications plan to support all business sectors and pro-actively engaging in all key stakeholder activities

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.

2012 – 2015 Planned Key Activities

- Continue management of contracts with international customers for spent fuel business
- Manage uranium and plutonium services for international spent fuel business
- Transport nuclear materials, including spent fuel, Mixed Oxide (MOX) fuel, and vitrified High Level Waste (HLW) internationally
- Support the NDA in the development and implementation of transport solutions to enable the UK decommissioning programme

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 optimise or dispose of these assets for the benefit of the NDA.

2012 – 2015 Planned Key Activities

- Manage non-nuclear site properties under NDA control in a cost-effective manner
- Actively market and either lease or sell surplus assets to generate income
- Review options for management of the Berkeley Centre and Hinton House
- Review options for the West Cumbria assets

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 (1965).

2012 – 2015 Planned Key Activities

- Provide insurance to the NDA to support its estate-wide insurance programme
- Manage the performance of its investment portfolio with due regards to the overall returns and associated risk assessment
- Ensure compliance with Guernsey regulations and changes relating to solvency

Glossary

| | |
|-------|---|
| AGR | Advanced Gas Reactor |
| ARAC | Annual Report and Accounts |
| BIG | Babcock International Group |
| C&M | Care and Maintenance |
| DECC | Department of Energy and Climate Change |
| DCIC | Ductile Cast Iron Containers |
| DFR | Dounreay Fast Reactor |
| DRS | Direct Rail Services |
| DSRL | Dounreay Site Restoration Limited |
| DSSC | Disposal System Safety Case |
| EIAD | Environmental Impact Assessment for Decommissioning |
| FED | Fuel Element Debris |
| GDF | Geological Disposal Facility |
| HAL | Highly Active Liquor |
| HAW | Higher Activity Waste |
| HLW | High Level Waste |
| ICP | Integrated Change Programme |
| ILW | Intermediate Level Waste |
| INS | International Nuclear Services |
| LETP | Liquid Effluent Treatment Plant |
| LLW | Low Level Waste |
| LLWR | Low Level Waste Repository |
| LoC | Letters of Compliance |
| MODP | Magnox Optimised Decommissioning Programme |
| MOP | Magnox Operating Programme |
| MOX | Mixed Oxide |
| MRWS | Managing Radioactive Waste Safely |
| NaK | Sodium Potassium |
| NDPB | Non-Departmental Public Body |
| NGO | Non-Governmental Organisations |
| NMPL | Nuclear Management Partners Limited |
| ONR | Office for Nuclear Regulation |
| PBO | Parent Body Organisation |
| PCM | Plutonium Contaminated Material |
| PFR | Prototype Fast Reactor |
| PNTL | Pacific Nuclear Transport Limited |
| POCO | Post Operational Clean Out |
| R&D | Research and Development |
| RSRL | Research Sites Restoration Limited |
| RWMD | Radioactive Waste Management Directorate |
| ShEx | Shareholder Executive |
| SLC | Site Licence Company |
| SSG | Site Stakeholder Groups |
| THORP | Thermal Oxide Reprocessing Plant |
| UKNWM | UK Nuclear Waste Management Limited |

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