Sellafield Ltd – Developing the Decommissioning Strategy

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Nuclear Decommissioning Authority

Owes the sites and competes contract – strategic direction

Sellafield Ltd (SLC)

Holds and is responsible for site licences – Sellafield and Capenhurst – tactical delivery

Parent Body Organisation:

Nuclear Management Partners Ltd

which is a consortium comprising...

URS
amec
AREVA

Holds SLC shares and provides reachback & management expertise and appropriate governance

Regulatory bodies inc Nuclear Installations Inspectorate, Health and Safety Executive, Environment Agency, Office for Civil Nuclear Security

A company owned by Nuclear Management Partners
Alignment of Strategies and Objectives

**DECC Departmental Strategic Objective (DSO)**
- NDA Strategic Objectives
- Sellafield Ltd Vision
- 1, 3 & 5 Year Vision
- Performance Incentives
- Level 1 Schedule & Supporting Programs
- Individual Performance

**Years 4 & 5 – Long Term Sustainability**
- Output based performance
- Ready for potential new missions

**Years 2 & 3 – Visibly Deliver Value**
- High Hazard Reduction
- Optimise assets
- Continue efficiencies

**Year 1 – Enable Accelerated Delivery**
- Strengthen the base
- Create bias for change
- Drive efficiencies

Disciplined professionalism

Delivering for the customer

- Establish the base
- Effective working
- Resource mobility
- Accelerated hazard & risk reduction
- Production optimisation
- Support service efficiency
- Project delivery improvement

People
Funds
Scope

A company owned by Nuclear Management Partners
What is there to Decommission?

- 170 major nuclear facilities and 2200 other buildings dating from 1940 to 2006
- 1 million m$^3$ of concrete above ground, 1 million m$^3$ below ground
- 37km road, 15km railway, 120km sewers, 65km water
- 7km pipebridges (21 off), 16km ducts and trenches (333 off)
- 61,200 M$^3$ of conditioned ILW
- Ongoing commercial operations until at least 2016
Decommissioning as a priority

- Decommissioning budget for 2010/11 ~ £460m
- Anticipated to grow steadily over next 10 years
- Lifetime costs estimated at ~£42Bn
- Currently employs 2450 Sellafield and ASW staff
- Significant supply chain support and expenditure
- Diversity of facilities to decommission
  - Legacy ponds & silos
  - Reactors
  - Reprocessing facilities
  - HA & ILW storage & processing facilities
  - Future plants to support decommissioning

Developing a decommissioning strategy

- Accelerating hazard & risk reduction in Legacy Ponds & Silos
- Preparation for “broadfront” decommissioning
- Transitioning Reprocessing Facilities reaching end of operational life
- Care/Maintenance of redundant Legacy facilities and Development of Decommissioning plans
**High Hazard Legacy Facilities – Strategic intent**

- Focus on short term risk reduction options
- “Out of the Box” thinking
- Selective application of ICP elements
- Exploit LC35 -Balance of Risk approach
- Programme focussed organisational structures

**Redundant Legacy Facilities – Strategic intent**

- Diminish/Defer/Delete low added value scope
- Focussed decommissioning programmes aimed at risk reduction and maintaining/developing competency
- Care and maintenance regimes to support extended lifetime of facilities
- Workface/work packages developed to support targeted/opportunistic acceleration
- Demonstrate ALARP
Existing Operational Facilities – Strategic intent

• Define standard arrangements to transition out of Operations
• Establish/seed Decommissioning expertise now
• Post Operational Clean Out (POCO)
• Enhanced POCO (as appropriate)
• Asset care and Maintenance programmes tailored to the decommissioning schedule
• Review of safety cases
• Training/Re-training programmes to support the transition
• Plant modifications to support future decommissioning

Broadfront Decommissioning Readiness – Strategic intent

• Decommissioning Technical Development Programme
  – Concrete decontamination
  – Remote Handling/Robotics
  – Bulk decontamination
  – Alpha decommissioning
• Benchmarking best practice
• Decommissioning Skills Development
  – Professional engineering
  – NVQ
  – Decommissioning Trainee Scheme
  – Links with National Skills Academy
• Waste Forms
• Site/Facility End States
Development of a Performance Plan

Summary

- Integrated Decommissioning strategy for next 17 years built into LTP 2010
- Performance Plan aims to “beat the contract baseline”
- Key objective accelerated risk and high hazard reduction – a National priority?
- Deliver for stakeholders