

# Appendix C -

## Major Projects Cost and Schedule

Major projects are defined as those projects with a lifetime cost of £100m or more with a business case approved by Government.

Project/Programme	Year initiated	Estimated cost at initiation (£m)	Current business case cost (£m)	Estimated cost Mar 2018 (£m)	Estimated end date at initiation	Current business case end date	Estimated end date Mar 2018
First Generation Magnox Storage Pond (FGMSP) - Bulk Sludge and Fuel Retrievals	2004	229	340	336	Dec 2012	Mar 2020	Aug 2019
<p><b>Key reasons for changes to cost and/or end date from year initiated to March 2018</b></p> <p>Increases in cost and schedule were associated with the complexity of installing new equipment into an existing radioactively contaminated and sensitive nuclear facility as well as project performance issues. Cost and schedule have been stable for some time and the project forecasts to complete in 2019.</p>							
Magnox Swarf Storage Silo (MSSS) - SEP Solid Waste Storage Retrievals	-	-	880	790	-	Sept 2023	Mar 2023
<p><b>Key reasons for changes to cost and/or end date from year initiated to March 2018</b></p> <p>The methodology and design have been revised over time as understanding of the installation and retrievals requirements has improved. Plans are now more realistic in engineering terms, reflecting the complexity of the final build and adequately reflecting the technical risks.</p>							
Magnox Swarf Storage Silo (MSSS) - Box Encapsulation Plant	2014	615	887	769	Jan 2021	Apr 2023	Feb 2022
<p><b>Key reasons for changes to cost and/or end date from year initiated to March 2018</b></p> <p>The key reasons for the increase are around changes in scope and design along with different commercial arrangements than had been originally envisaged. Price changes on long-lead time, machinery and equipment is also a factor.</p> <p>The final business case was approved in December 2017 and will take the project through to completion. This reflects the scope changes associated with the Alternative Intermediate Level Waste Strategy.</p>							
Magnox Swarf Storage Silo (MSSS) - Silo Maintenance Facility	2006	180	255	254	Oct 2011	Aug 2019	Dec 2018
<p><b>Key reasons for changes to cost and/or end date from year initiated to March 2018</b></p> <p>At the design gate firmer prices from the contractor resulted in cost and schedule estimates greater than initially anticipated. The main reasons for the increase in cost were the additional resources identified by the contractor to deliver the project and an increase in the contingency provision.</p> <p>Project completion was delayed as part of an overall portfolio reprioritisation exercise in 2014 and to align with overall MSSS requirement dates.</p> <p>Further cost increases have resulted from contractor performance issues, and inclusion of additional scope associated with the alternative waste management approach. The completion date is unchanged.</p>							

# Appendix C -

## Major Projects Cost and Schedule

Project/Programme	Year initiated	Estimated cost at initiation (£m)	Current business case cost (£m)	Estimated cost Mar 2018 (£m)	Estimated end date at initiation	Current business case end date	Estimated end date Mar 2018
Pile Fuel Cladding Silo (PFCS) - Early Retrievals Project	2005	495	601	484	Oct 2019	Apr 2021	Nov 2019
<p><b>Key reasons for changes to cost and/or end date from year initiated to March 2018</b></p> <p>In mid-2013 difficulties with the technical complexity of the planned design led to a review of the proposed solution. This resulted in a revised approach which required the redesign of the waste retrievals and handling equipment, increasing the cost and schedule.</p> <p>The revised business case, approved by Government in September 2016, provided an updated cost and schedule reflecting the new approach. The business case highlighted three key opportunities to further improve the project cost and schedule, around further simplification of the retrievals, waste handling and control equipment. Work is ongoing to realise these opportunities.</p>							
Pile Fuel Cladding Silo - Box Encapsulation Plant Product Store - Direct Import Facility	2006	119	291	291	Jan 2019	Mar 2020	Feb 2020
<p><b>Key reasons for changes to cost and/or end date from year initiated to March 2018</b></p> <p>Delays to the completion of detailed design scope led to increased design and supervision costs, delaying procurements and creating inefficiency in construction activities on site. Contractor performance has been an ongoing concern and this has resulted in some forecast cost increase. Sellafield Ltd has now taken over full control of project delivery.</p>							
Evaporator D	-	-	750	749	-	Dec 2017	Dec 2017
<p><b>Key reasons for changes to cost and/or end date from year initiated to March 2018</b></p> <p>Increases were a result of design and scope changes, supply chain performance issues and the constrained working environment. This project now closed out and the facility is operational.</p>							
SIXEP Contingency Plant	2014	394	500	403	Nov 2024	Nov 2026	Dec 2024
<p><b>Key reasons for changes to cost and/or end date from year initiated to March 2018</b></p> <p>At initiation in April 2014 the project estimate was based on a volumetric estimate. As the project has matured through Concept (Apr 2015) and Preliminary Design (July 2016) stages the increased scope definition has enabled a more accurate and definitive estimate to be developed based on measured quantities.</p> <p>Some cost and schedule slippage has resulted from an ongoing issue with valve supply, which has required consideration of a different procurement approach. The current estimate also incorporates increased corporate knowledge, learning from other new build projects at Sellafield and benchmarking exercises.</p>							

# Appendix C -

## Major Projects Cost and Schedule

Project/Programme	Year initiated	Estimated cost at initiation (£m)	Current business case cost (£m)	Estimated cost Mar 2018 (£m)	Estimated end date at initiation	Current business case end date	Estimated end date Mar 2018
Dounreay Decommissioning Programme	2012	1,552	2,328	2,442	Jan 2025	Oct 2029	Oct 2029
<p><b>Key reasons for changes to cost and/or end date from year initiated to March 2018</b></p> <p>The majority of 2017/18 Business Plan activities have been delayed or deferred to allow reprioritisation of the Dounreay 'Exotics' programme. The target dates to achieve the Interim End State and the associated cost targets are being further reviewed as a consequence of supporting the consolidation of 'exotic' fuels at Sellafield. It is expected that these changes will still deliver a significant reduction in the total lifecycle costs of the site up to its Final End State.</p>							
National Low Level Waste (LLW) Programme	2011	1,750	1,750	1,750	Mar 2030	Mar 2030	Mar 2030
<p><b>Key reasons for changes to cost and/or end date from year initiated to March 2018</b></p> <p>No change in overall LLW Programme. These will be subject to revision upon approval of the new Lifetime Plan (LTP18).</p>							
Magnox Decommissioning Programme	2014	5,537	5,551	5,551	Nov 2028	Nov 2028	Nov 2028
<p><b>Key reasons for changes to cost and/or end date from year initiated to March 2018</b></p> <p>The programme cost included in the table above has been extracted from the Lifetime Plan (LTP17) and is to the point at which all sites will have entered their interim states, prior to a period of quiescence known as Care and Maintenance. The cost at initiation and the current estimated cost is broadly the same. This is not unexpected as the work is being delivered in line with the plan cost.</p>							

NOTE: The historic cost estimates in the table above are expressed in the money values of the year in which the estimate was prepared (i.e. have not subsequently been adjusted for inflation).