

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

Project/ Programme	Year initiated	Estimated cost at initiation (£m)	Current business case cost (£m)	Estimated cost Mar 2020(£m)	Estimated cost Mar 2020 (£m)Variance	Estimated end date at initiation	Current business case end date	Estimated end date Mar 2020	2019/20 estimated Schedule Variance
First Generation Magnox Storage Pond (FGMSP) - Bulk Sludge and Fuel Retrievals	2004	229.0	400.0	339.1	2.0	Dec 2012	Mar 2020	May 2020	+12 mths
Key reasons for changes to cost and/or end date from year initiated to March 2020									
Increases in cost and schedule compared to initiation were associated with the complexity of installing new equipment into an existing radio-actively contaminated and sensitive nuclear facility as well as project performance issues. There has been a £2m cost variance in year due to delays associated with plant failure and subsequent repair. This has also extended the project completion forecast to May 2020									
Magnox Swarf Storage Silo (MSSS) - SEP Solid Waste Storage Retrievals	-	-	880.0	878.5	68.5	-	Sept 2023	Dec 2024	+21 mths
Key reasons for changes to cost and/or end date from year initiated to March 2020									
In year cost and schedule increases have resulted from delivery issues and delays on several elements of the three SEP machines including installation, commissioning, hand-over and ventilation works. The project is forecasting start of retrievals in 2021.									
Magnox Swarf Storage Silo (MSSS) - Box Encapsulation Plant	2014	615.0	887.0	987	204.1	Jan 2021	Nov 2023	Nov 2022	+12 mths
Key reasons for changes to cost and/or end date from year initiated to March 2020									
Variances in the early stages of the project concerned changes in scope and design along with different commercial arrangements than had been originally envisaged. The current scope also reflects changes associated with the Alternative Intermediate Level Waste Strategy. The BEP project has experienced significant delivery issues subsequently, with cost and schedule now forecast to exceed business case approvals. A 'tiger team' has been put in place to review the impacts of any slippage and to implement appropriate mitigation. A review of the full project cost and schedule is underway with a revised sanction strategy to follow.									
Pile Fuel Cladding Silo (PFCS) - Early retrievals project	2005	495	601	473.8	2.6	Oct 2019	Apr 2021	Aug 2020	+9mths
Key reasons for changes to cost and/or end date from year initiated to March 2020									
Variances to the forecast at initiation followed a review of the proposed solution in 2013. This resulted in a revised approach which required the redesign of the waste retrievals and handling equipment, increasing the cost and schedule. 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 improve the project cost and schedule, around simplification of the retrievals, waste handling and control equipment. Work has continued to realise these opportunities, reflected in the cost and schedule estimates being well within business case approvals. In year cost and schedule increases have been the result of delays in the transition to active commissioning									

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Pile Fuel Cladding Silo (PFCS) Box Encapsulation Plant Product Store – Direct Import Facility	2006	119.0	400	400	25.5	Jan 2019	Mar 2020	June 2021	+5 mths
Key reasons for changes to cost and/or end date from year initiated to March 2020 A revised Business Case reflecting cost and schedule increase was approved by HMG during the 2018/19 financial year. 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 there has been significant rework required on pipework which has resulted in in-year forecast cost and schedule increases. Sellafield Ltd took full control of the project in Q1 financial year 2019/20 and remaining mechanical and electrical installation activities have been consolidated under a single contractor to address performance issues. However, as a result of the performance issues re-sanction of the project is now necessary and a sanction submission is being prepared.									
SIXEP Contingency Plant	2014	394	500	574.2	154.5	Nov 2026	Nov 2026	Aug 2028	+5 mths
Key reasons for changes to cost and/or end date from year initiated to March 2020 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 enabled a more accurate and definitive estimate to be developed based on measured quantities. More recently the most significant issue experienced on this project concerns the supply of valves, with a decision being taken to implement an alternative procurement strategy. This has introduced both cost and schedule slippages in 2019/20 and prior years. A revised Outline Business Case is proceeding through NDA and Government approvals									
Sellafield Product and Residue Store Retreatment Plant	2019	885	885	777.8	48.8	Mar 2028	Mar 2028	May 2027	+6 mths
Key reasons for changes to cost and/or end date from year initiated to March 2020 During 2019/20 quarterly Quantitative Schedule Risk Analysis (QSRA) have been carried out and the outputs of these have been used to update the forecast lifetime cost and schedule. The biggest risk currently to the project forecasts is around glovebox supply and efforts are being taken to mitigate this.									
Electrical Supply New Construction	2018	238	238	235.6	15.6	Mar 2023	Mar 2023	July 2025	+39mths
Key reasons for changes to cost and/or end date from year initiated to March 2020 Cost and schedule forecast increases are associated with site prioritisation and deferral of scope which has impacted on design, procurement and construction timescales. A full business case comprising a greater level of project understanding is being developed and will be submitted to HMG in 2021									
Replacement Analytical Project	2018	800	800	626	-	Feb 2029	Feb 2029	Jan 2028	-
Key reasons for change to cost and/or end date from year initiated to March 2019 NEW: The Outline Business Case was approved by HMG in January 2020.									