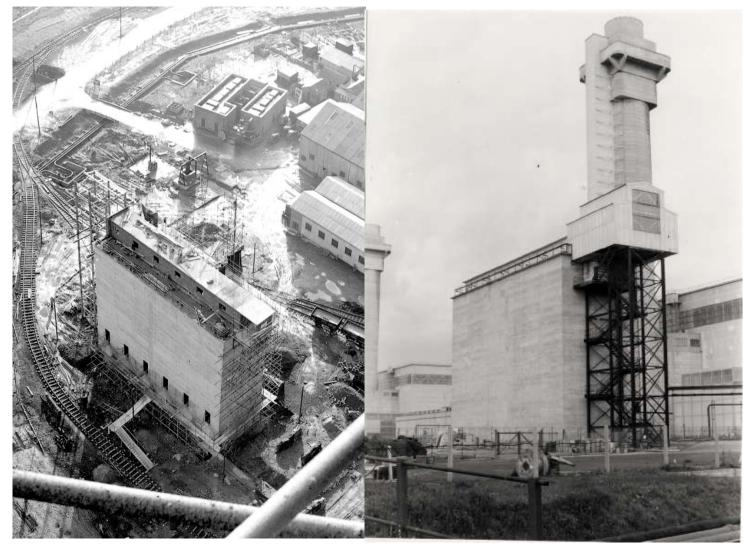


Pile Fuel Cladding Silo





PFCS





Ready to Retrieve – the tip of the Iceburg



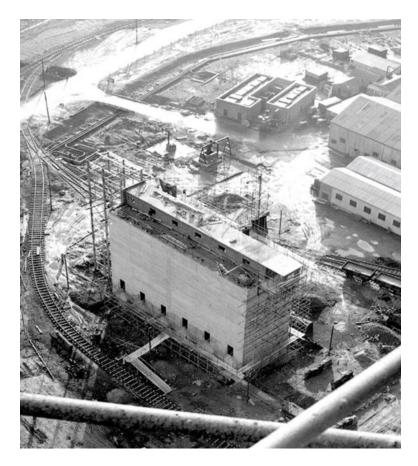


First clean and stabilise





Building a Foundation





1950's 2010's



The Big Numbers

2013: £559m



New Goal / Vision

Early Retrievals

Begin risk reduction as early as practically possible using the principles of Lead and Learn in areas with significant uncertainty

Lead and Learn

- Remove uncertainty and provide predictability to future retrieval campaigns
- Areas of uncertainty require simple, flexible solutions that do not preclude adapting to new information

Achieved through

- Collaboration
- Innovation
- Local Supply Chain Integration

Pile Fuel Cladding Silo Acceleration



June 2016: UK Govt approval of 'lead and learn' early retrievals approach



Total programme cost:

£905m



Start of retrievals



Further acceleration opportunity for retrievals

2020

Previous forecast start of retrievals

2022

Original forecasted start of retrievals in PP14



How was collaboration established?

Before

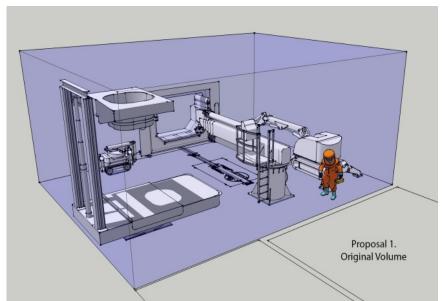
After

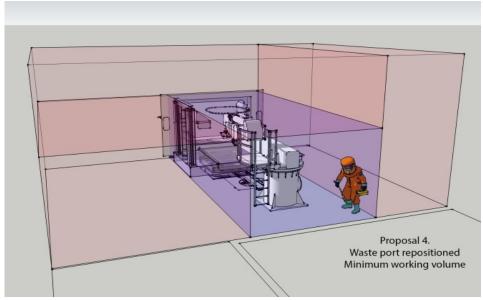
Large, complex, with layers of man marking & double handling of deliverables



Simplified, integrated, single delivery focussed team

Innovation and Fit For Purpose





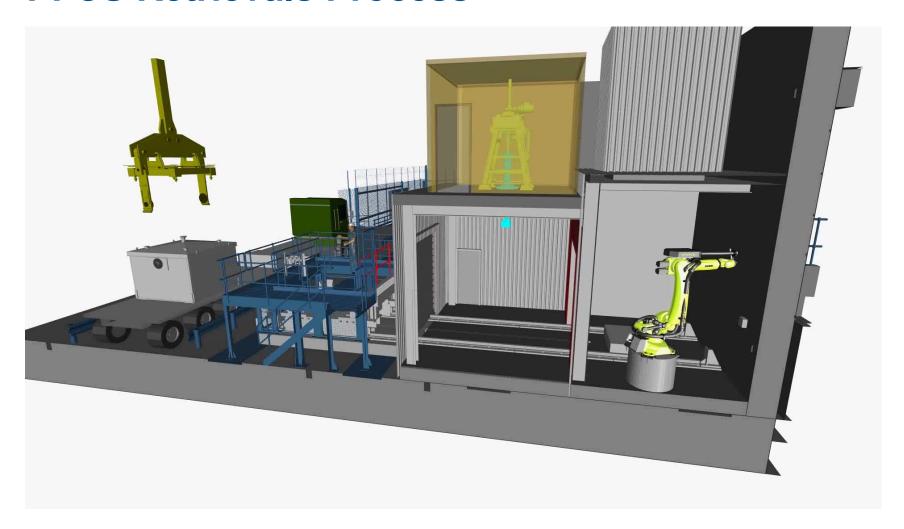
 $(535m^3)$



 (109 m^3)



PFCS Retrievals Process





Local Supply Chain Integration

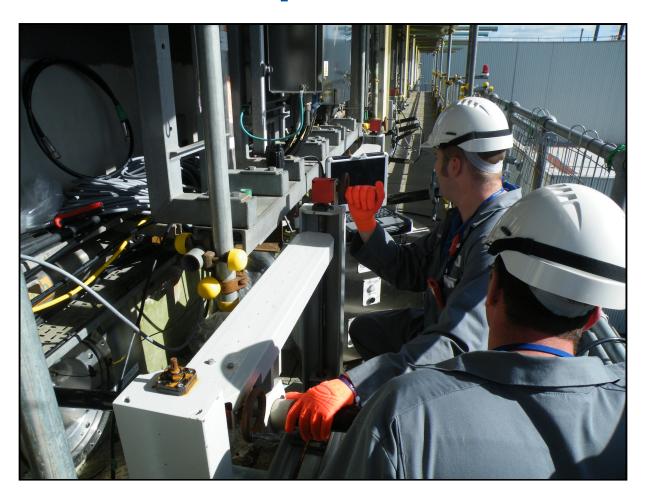
Aim – Establishing a collaborative relationship with a wide range of local suppliers

Benefits

- Needs and Constraints understood
- Informed technology scanning
- Easy access to plant to confirm viability
- Geographically easier to get together
- Local test rigs and training
- Local support during operations



Deflector plate removal



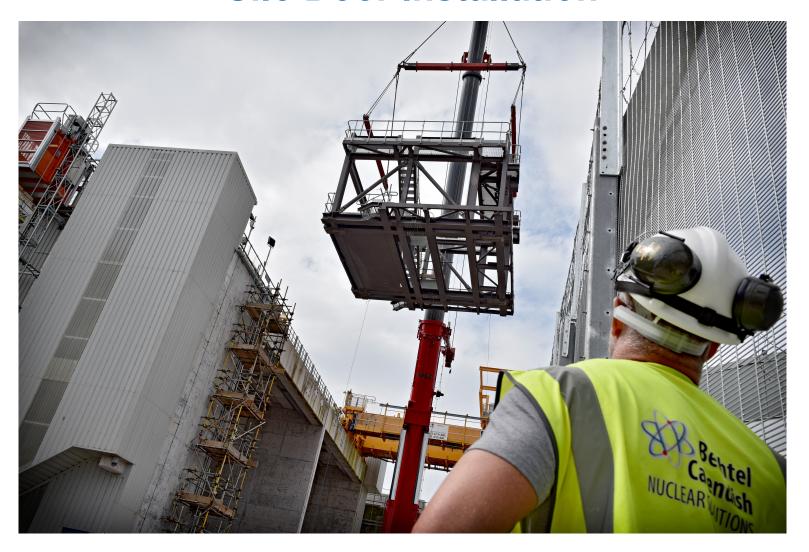


Deflector plate removal



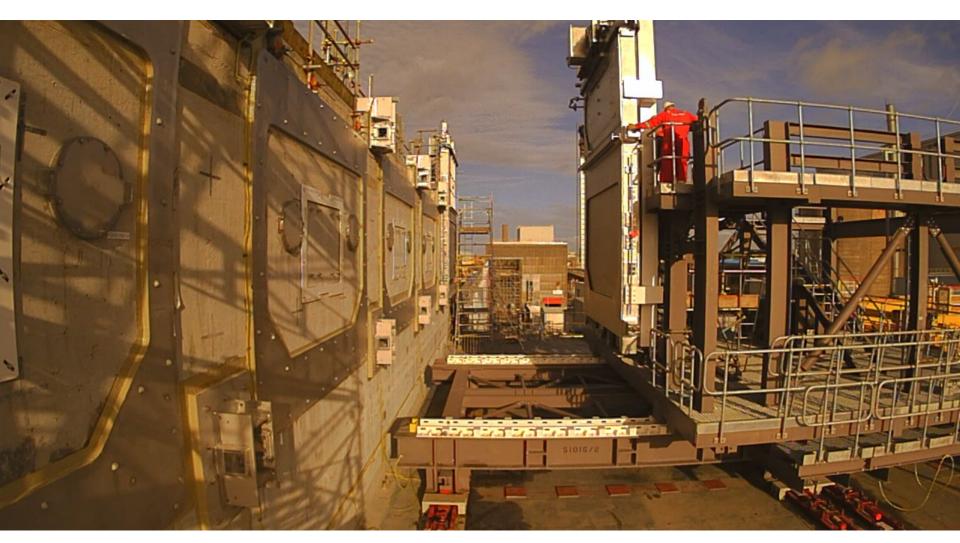


Silo Door Installation





Silo Door Installation









Retrievals Access Penetration





Retrievals Access Penetration







Rosyth Manufacture



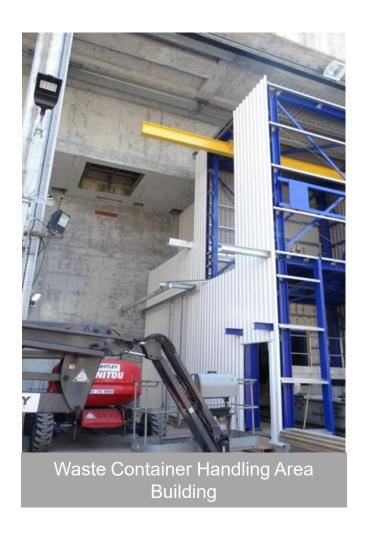


Unit B – Services Module nearing completion

Outcomes – Testing & Commissioning



Retrieval Equipment Installation



Installation of Kuka robot onto its pedestal

Retrieval Equipment Installation





Waste Container Transfer Area Module Installation

Outcomes – Ready to Retrieve!



Questions?

