Regulation of Sellafield and GB Decommissioning Sites

2nd Fukushima decommissioning Forum

Iwaki- July 2017

Mina Golshan – Director, Office for Nuclear Regulation, UK
Contents

• **About ONR**: who we are and what we do?

• Regulatory Challenges at Sellafield

• Our Approach to regulation of Sellafield and decommissioning sites

• Progress so far in pictures

• Conclusions
INDEPENDENT REGULATOR with a Mission:

‘To provide efficient and effective regulation of the UK nuclear industry, holding it to account on behalf of the public’

~ 550 staff (370 technical specialist inspectors)

Liverpool  Cheltenham  London
ONR’s Principal Functions

• To grant licences to companies to use sites to operate nuclear installations – cradle to grave
• Inspect and enforce the law – 36 Standard Licence Conditions (LC) and other Regulations
• To review and assess safety cases to inform decisions to permission specified activities
• Setting standards – usually de-facto eg Safety Assessment Principles, SyAPs, Guidance etc

Our authority is for: nuclear & industrial safety, security, transport & supply-chain purposes.
GB Regulatory Regime

- Is non-prescriptive; it sets broad goals for licensees in seeking safe, secure and environmentally responsible hazard and risk reduction
- Allows great flexibility for duty-holders e.g. can support prompt or deferred approaches
- ONR is, proportionate and pragmatic; we observe the UK Regulators’ Code
- Policy of openness and transparency to engender public confidence
Decommissioning, Fuel and Waste Sites in the UK

- Total of 21 Licensed sites
- Sellafield
- 10 shutdown Magnox reactors
- 3 research and restoration sites
- 7 waste management and fuel-cycle facilities

ONR also provides advice related to licensing of a deep Geological Disposal Facility (GDF)
Sellafield Licensed Site in NW England
ONR's strategy for regulating Sellafield

The strategy identifies three key outcomes, against which ONR will measure its success:

• Accelerated hazard and risk reduction across the Sellafield site;
• Evidence-based confidence that the licensee is complying with its statutory obligations and that workers and the public are protected from the hazards of the site;
• Stakeholder confidence that ONR's regulatory approach is appropriately targeted, risk-based, proportionate and effective.
Fundamental principles of our strategy for regulating Sellafield

» Agree Common priorities
» Effective use of resources across all stakeholder organisations
» Removal of barriers and unnecessary bureaucracy
» Removal of distractions and diversions
» Appropriate incentives and removal of disincentives
» Application of “Fit-for-purpose” solutions
» Balance of risk
» Communications
Magnox Swarf Storage Silo
Overall Picture of MSSS Hazard and Risk Reduction

• Liquor Activity Reduction (LAR) transfer (to Site Ion Exchange Effluent Plant, SIXEP)
• Install 3 Silo Emptying Plants (SEP) for waste retrieval
• Long-term intermediate storage in 3m³ boxes
Quiescent Passive Ventilation
MSSS Retrieval of Waste - SEP
Pile Fuel Storage Pond

Fuel completely removed from the pond last year and 12 drums of sludge retrieved and encapsulated. Key regulatory milestone for 2017/18 is regulate SL such that it achieve retrieval and encapsulation of 100 drums.
First Generation Magnox Storage Pond

- First Generation Magnox Storage Pond (FGMSP) – retrievals commenced in April 16 and >25 skips had since been retrieved equating to approximately 50 tonnes.
Pile Fuel Cladding Silo

Removal of the deflector plates from the Silo (PFCS) commenced in Sep 2016, installation of six new containment doors completed in Nov 2016 with the first monolith removed and penetration sealed.

Waste retrievals brought forward to commence in 2020
Thank you