



Updates in Site End State and Stewardship Strategy:

UK Nuclear Decommissioning Authority (NDA)

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Updates in site end state and Stewardship Strategy

- Update to NDA Strategy (Strategy 5)
- Strategic Framing of Site end States
- Safe Stewardship as a Lifecycle Discipline
- Challenges since our last update
- Opportunities

A UK cultural moment in the context of nuclear site stewardship



5th November 1605: The Gunpowder Plot which included Guy Fawkes was a failed attempt to assassinate the King and destroy parliament. The aim to blow up the Houses of Parliament in London

420 Years of Cultural Stewardship: The Gunpowder Plot has been remembered, reinterpreted, and ritualized across centuries — an interesting case study of how society manages historical narratives.

The narrative has evolved—from demonization to a reflection of how society ritualizes risk and rebellion into cultural memory.

300-Year Nuclear Stewardship Horizon: UK nuclear policy plans for long-term site management, often spanning centuries, to ensure safety, environmental protection, and public trust.

Intergenerational Responsibility: Both timelines reflect the challenge of passing down knowledge, values, and responsibilities across generations.

NDA Strategy 5



- Mid-November: Present final draft Strategy (post-consultation) to our senior stakeholder group (NDSPG).
- Late 2025/Early 2026: Endorsement by the NDA Board.
- Early 2026: Submission to Government for review.
- March 2026: Final publication, as planned.
- [The NDA group Draft Strategy 2025 for public consultation - GOV.UK](#)



Key principles from NDA Strategy 5

- Avoid duplication in our development of new assets
- **Enable reuse of our land and assets, either by our operating companies or others**
- **Minimise our nuclear footprint, for example, by delicensing where we can or consolidating our nuclear activities where practicable**
- **Integrate transport and logistics considerations into our spatial planning for any new developments**
- Ensure climate resilience and support delivery of net zero by 2050 in line with current government policy
- Deconflict and secure synergistic opportunities across the UK nuclear enterprise





Site End State - UK

The condition to which the site (land, structures and infrastructure) will be taken at the end of the decommissioning process

- It Must be:
 - Safe
 - Sustainable
 - Publicly Acceptable
- Enable beneficial reuse as early as possible
- Controls may be used to protect people and the environment from residual hazards where necessary
- Assumptions at this stage due to future uncertainty. Enough to set direction and focus future work

Establishing Preferred Site End State Assumptions

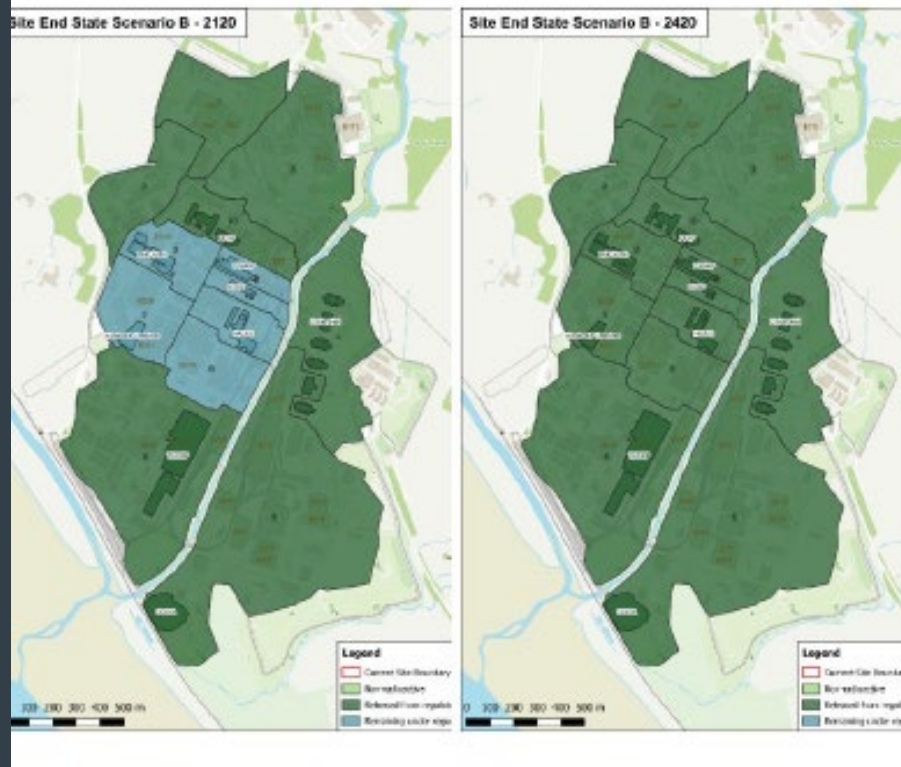


Continued development of credible risk informed site end states

- **Winfrith:** leads with a and end state which defines two disposals and other land which will have a condition suitable for open access
 - Submitted an application for environmental permit (Dec'24)
 - Application for planning permission shortly
- **Trawsfynydd:** Application for disposal of cooling ponds structure
 - Part of the overall end state
 - In iteration as part of lead and learn process
- **Other NRS sites:** iterative work continues
 - Better understanding engagement
 - Applying LFE from applications

Establishing Preferred Site End State Assumptions

B. Release most of site by 2120 but retain control of higher hazard areas for up to 300 y



Continued development of credible risk informed site end states

- **Sellafield:** Component assessments complete with a site balance underway
 - Condition directly relates to the final control dates
 - Further stakeholder engagement to do
 - Mapping assumptions across decommissioning and land use
- **Dounreay:** Implementing and understanding material uncertainties
 - Confidence in assumptions for the LLW disposal pits
 - Defining the outcomes of decommissioning programmes

Evolution of Site End States Strategy



Adoption of iterative assumptions

- review as data and community expectations evolve
- Manage new potential options
- Integrate with evolving land use planning and national policy

Strategic Thread thinking

- How does condition affect:
 - **Decommissioning**
 - **Waste management**
 - **Land use and release**
- Enabling change control
- Defining confidence in programmes and masterplans

Safe Stewardship as a Lifecycle Discipline



Strategy 5 introduces the theme of ***Safe Stewardship*** of our sites

- Builds on and extends from the Land quality management themes of previous strategies
- Three key themes
 - Clear roles, responsibilities and compliance
 - Continuous improvement and sustainable management
 - Stakeholder engagement and knowledge preservation

Safe Stewardship as a Lifecycle Discipline



Work underway

- A review of the defined roles and responsibilities for managing the estate which establish compliance for legal, regulatory, health, safety, environmental, and security obligations
- maintaining, and continuously improving an estate management plan
- applying circular economy principles to minimise environmental impact and support sustainability

Safe Stewardship as a Lifecycle Discipline



Strategic Elements of Stewardship:

- Plans are central to permit applications and permissioning
- Stewardship must be seen as time bound not indefinite
 - A risk-based responsibility
 - Recognition of funding
- Key to understand why nuclear might be different
 - Responsible waste and material storage and reuse
 - Liability management

Safe Stewardship as a Lifecycle Discipline



Stakeholder Engagement and Knowledge Preservation

- Active engagement
 - with local authorities, communities, and stakeholders
 - ensure the NDA's mission aligns with regional and national needs.
 - review of engagement methodologies
- Continuing with our robust knowledge management system
 - Taxonomy
 - Indexing
 - Ease of access and future availability

Challenges



Balancing risk, cost, and stakeholder expectations

Regulatory misalignment

- implementation of proportionate regulatory control.

Knowledge management

- ensuring continuity and resilience over decades

Opportunities



- Embedding UN Sustainable Development Goals (SDGs) into strategy.
- Circular and recycling economy approaches—reuse, recovery, minimising waste.
- Extending lifecycle management to include post-closure stewardship.
- International benchmarking
 - Engagement through IAEA and NEA
 - learning from DOE (USA), France, Canada and others



Thank You

Nuclear Decommissioning Authority
www.nda.gov.uk