

AN ANALYSIS OF JOHN FINGLETON'S

NUCLEAR REGULATORY REVIEW 2025

Introduction:

Judging by the comments seen on Linked-in, it seems that John Fingleton's "Nuclear Regulatory Review 2025", has generally been well-received by the civil nuclear industry to date. This article reviews some of the key Recommendations within the Report and offers some comments on the findings from the perspective of the civil nuclear sector.¹

This is certainly a comprehensive, wide-ranging report, with some bold and advanced thinking and sound proposals to improve nuclear regulation.

The Report identifies three fundamental regulatory drivers for high cost and delay in the nuclear sector and it is hard to argue against these:

-risk aversion;

-priority for process over outcome;

-lack of incentives (to maximise social benefits or minimise social costs) for regulators and operators.

The Taskforce then goes on to focus on the following key areas:

- a) The suitability of the existing regulatory frameworks;
- b) Relevant legislation and supporting guidance;
- c) The scope and capacity of regulatory bodies;
- d) The expectations on regulatory outcomes;
- e) The culture and processes within the nuclear sector;
- f) Support for innovation and the deployment of new nuclear; and
- g) International harmonisation of regulatory approaches.

The Report proposes solutions under the following headings:

Simplification of nuclear regulation:

The Report states that this is "an opportunity to simplify, streamline and improve coordination across the regulatory landscape." In practical terms this means a strategic steer requirement from the UK Government. (Recommendation 1)

"This steer should set a national priority, emphasise urgency, and balance safety with delivery."

¹ The Report covers aspects of the regulation of both civil and defence nuclear

Strong direction from central government is always to be welcomed and Industry is likely to be supportive of the proposal to set strategic priorities and drive delivery, with the caveat that Industry must then be allowed to get on and deliver.

Where Government clearly can play a useful role is ensuring alignment and a consistent approach across department and regulatory agencies, referencing a "national priority." The Government has already issued (on 26 November 2025) its strategic steer to the nuclear sector.² This Policy Paper refers to the following key principles for delivery:

- -pace as a security imperative;
- -uncompromising on safety and security-proportionately applied;
- -one-team regulation;
- -international engagement.

Picking up on this theme of "one-team regulation", and in the context of the current system of multiple approvals from different entities, a Lead Regulator model is proposed, with the establishment of a collective decision-making body, to be known as the Commission for Nuclear Regulation "to formalise collective decision making and leadership for the sector going forward."

The Commission's primary duty will be to "...protect the health and safety of workers and the public, and enable the safe, secure and environmentally responsible deployment of nuclear technologies, through efficient, effective and proportionate regulation for the benefit of society."

This is a bold move and will undoubtedly take time to bed in (the Report refers to a delivery timeline of December 2027), which is why in the meantime it is proposed that an interim lead regulator model should be set up with the ONR designated as the default lead regulator for the nuclear sector (Recommendation 3).

On Safety cases a Recommendation (Recommendation 5) is made to reset safety case development, essentially to ensure that safety cases are returned to their original purpose, namely for use by duty holders to support operations. The aim of the reset is to shorten and simplify safety cases so that they are more practical and user-friendly. This is a sensible proposal and is likely to be welcomed by Industry.

Risk management and Proportionality:

The review of the application of ALARP (as low as reasonably practicable) is long overdue. There is much industry experience of an emphasis by regulators on the "as low as" as to the detriment of the "reasonably practicable" element. This is in part linked to the tolerability of risk criteria which the

² See: https://www.gov.uk/government/publications/prime-ministers-strategic-steer-to-the-nuclear-sector/prime-ministers-strategic-steer-to-the-nuclear-sector-following-the-2025-nuclear-regulatory-taskforces-review

Report acknowledges is out of date and not reflective of the "modern state of the nuclear sector and the societal demand for its outputs..."

The Taskforce therefore recommends (Recommendation 6) that the Government should redefine the tolerability of risk for nuclear.

The Taskforce notes that the HSE's Reducing Risks Protecting People (R2P2) (published in 2001) builds on the principles set out in the "Tolerability of Risk" (ToR) framework, and this now acts as the primary guidance document for how the HSE and ONR interpret and apply health and safety law.

The ONR's Safety Assessment Principles (SAPs) are themselves based on ToR concepts of "unacceptable" and "broadly acceptable" to determine numerical risk targets called Basic Safety Levels (BSLs) and Basic Safety Objectives (BSOs). But there is a view that these dose levels have been set "...below the levels needed to ensure the safety of the public and workers in normal operation" and indeed that they are below international levels.

This Recommendation 6 therefore also goes on to state that: "The Government should make a direction to the ONR under section 92 of the Energy Act 2013 and to the EA section 40 of the Environment Act 1995 so that, in exercising their functions, risks at or below broadly acceptable levels are deemed to be ALARP and ALARA unless there are strong and compelling reasons to the contrary."

In addition, there is a further Recommendation (Recommendation 7) that nuclear regulator guidance should be reviewed "in line with revised tolerability of risk." It is also proposed that: "Regulators should undertake an immediate review of numerical targets set in their guidance. This review should ensure alignment with the government definitions of tolerability and their application. It should also align with levels set internationally."

This is a major and fantastic opportunity for the nuclear sector to bring matters up to date based on sound evidence.

There is a further Recommendation (Recommendation 8) to "define the meaning of proportionality in the Health and Safety at Work Act." The Government is also asked to propose secondary legislation under section 50 of HSWA for clarification of the law. What is proposed, and to be welcomed, is a multi-faceted appraisal of the level of risk, by which the true nature and level of the risk can be considered (including the scale of the potential impact and the cost, time and difficulty involved).

Environmental Assessments and Permitting:

The Taskforce looks at the potential for reform by way of improving the current Environmental Impact (EIA) regime, recalibrating the Habitats Regulations and reducing Environmental Permitting delays.

Amendments to the Habitats Regulations are proposed, with a delivery deadline of December 2027. Of note there is a Recommendation (Recommendation 11) to:

"Apply or modify the 2017 Habitats Regulations to:

- a) Remove the need to prove a negative when drawing a conclusion on impacts....
- b) Define 'compensatory measures' to expressly exclude the need for like-for-like compensation and instead accept that overall enhancement and measures to support the coherence of protected sites is sufficient
- c) Establish that de minimis effects do not constitute an adverse effect on integrity, including where they have a de minimis contribution to in-combination effects with other projects."

Under Recommendation 12 developers are offered an alternative pathway to comply with the Habitats Regulations by way of payment of a substantial fixed contribution to Natural England at the outset.

Recommendation 13 deals with the proportionality in the Environmental Impact Assessment (EIA) regime such that the EIA Regulations are amended to: "a) *Include a "principle of proportionality"* which requires decision-makers to, consider existing decisions and the extent to which outstanding matters will be addressed through other regulatory regimes...."

An innovative concept of "Modular Low-Carbon Acceleration Zones" is introduced (with examples referred to from Spain, Germany and France) (Recommendation 14).

On Environmental Permitting it is recommended (Recommendation 17) that statutory timelines are introduced (with a time-limit for decision-making of 42 days and a limit on mutually agreed extensions of 56 days). Timelines have notoriously slipped under the Environmental Permitting Regulations and so this is a sensible proposal.

The Planning System:

Significant reforms are also proposed on planning. The Report flags up that the current Nationally Significant Infrastructure Project regime is inefficient.

Under Recommendation 24 the Critical National Priority (CNP) (as contained in EN-1 and draft EN-7) should be updated by DESNZ to strengthen the policy presumption by removing the words "in general", and "it is likely" and replacing the words "as a starting point" with stronger language which reflects the need for new low-carbon infrastructure.

Under Recommendation 25 Guidance should be issued by the Ministry of Housing, Communities and Local Government (MHCLG) to streamline the Development Consent Order (DCO) regime.

Recommendation 32 deals with the subject of encouraging fleet approaches in EN-7.

DESNZ should amend EN-7 to include a statement that "where adverse effects arise as a result of the adoption of a fleet approach, the adverse impact will not be a basis for refusal unless exceptional circumstances apply."

The Semi-Urban Population Density Criteria (SUPDC) is a test of whether a potential site is acceptable for a nuclear facility based on how many people live around the facility and their distance from the site. It has its origins in a 1967 paper modelling an iodine plume in the event of a radioactive release.

Recommendation 33 proposes amending the SUPDC in EN-7. It is proposed that DESNZ amends EN-7 so that it provides for two routes open to LWRs for complying with the SUPDC: "either compliance with the methodology, or via a new 28-day process culminating in an approval from the Secretary of State or the Commission (if established)." The Recommendations also goes on to state that: "The ONR should revise SUPDC to account for scientific and technological progress since the original system was created." This is long overdue and will be welcomed by Industry. Industry will be disappointed however that the delivery timeline is not earlier than December 2026.

Recommendation 34 deals with Proportionate Outline Planning Zones and Detailed Emergency Planning Zones under REPPIR19. ONR and UKHSA should be asked to calculate revised default Outline Planning Zones (OPZs) for reactors of differing types and sizes, based on best scientific information.

Regulatory Justification is to be streamlined (under Recommendation 35) such that legislation is proposed that would deem the grant of a planning permission, the completion of Stage 2 of the GDA, or the grant of a nuclear site licence for a nuclear installation to be a justified practice. Again, a completely sensible proposal given that the activities and work involved at present under the justification process is covered off in later regulatory processes. It is disappointing that the delivery timeline is as late as December 2027 when arguably this should be achievable much earlier.

Culture, Capacity, Capability, & Innovation:

Chapter 9 deals with the critical human capital requirements to deliver the UK's nuclear ambitions. Boards should assess their organisation's culture, including safety culture, and take decisive steps to align it with delivering their strategic objectives with radical efficiency and effectiveness. (Recommendation 38)

Also proposed (Recommendation 39) is an acceleration by the Nuclear Skills Delivery Board in "... efforts to build knowledge and experience into a diverse workforce with greater focus on non-technical skills, alongside technical expertise, to meet future needs."

Recommendation 40 proposes an enhancement of the "...terms and conditions for regulatory roles that require strong technical judgment so that skilled professionals are attracted and retained."

International Harmonisation:

The context is that national approaches to nuclear regulation remains diverse, creating challenges for standardisation and mutual recognition of design approvals.

The Report proposes a joint Government and Regulator International Strategy and Action Plan (Recommendation 42). Government and Regulators should develop an international regulatory strategy and delivery plan with clear timelines and deliverables:

"with the aim to:

• Accelerate the assessment of new reactor designs with the expectation that decisions of acceptability of design will be given within two years and subsequent licensing within one year through; – Maximising the ability to undertake joint reviews on new designs with other trusted

international regulators; and – Maximising the leveraging of existing regulatory reviews approved by other trusted national regulators; and

• Enhance engagement with international bodies and take a leading role in nuclear regulatory standardisation and harmonisation for the benefit of the UK and global deployment of new nuclear power. Government should provide dedicated funding to regulators to enable them to implement these ambitious international engagement strategies. Government should make a direction under the Energy Act 2013 to the ONR that it should maximise the leverage of existing regulatory reviews approved by other trusted national regulators. This should establish that the ONR is justified in relying on the approvals from states where there are formal working arrangements, such as Memoranda of Understanding. The direction should establish a strong presumption, without prejudice to regulatory independence, that regulatory attention is focused on national or site-specific risks or issues."

It is hoped that this will give duty holders a strong basis for challenges to design changes that they face.

Additional Recommendations and Issues:

A long overdue review and revision of the Nuclear Installations Act 1965 is proposed. For those that work in the industry and have cause to refer to this Act on a regular basis an opportunity to redraft a piece of key legislation in clear and precise language is long overdue and so this is to be welcomed. It is proposed that the review includes a review of the standard conditions in a nuclear site licence, to allow it to be modernised in the light of current revised practice, taking account of international developments (by way of for example maritime applications). Finally, and a major ask from technology developers, it is recommended (Recommendation 46) that Government should reduce uncertainty on the release of sites for future nuclear projects and a clear process is set out.

Conclusion:

The Report presents a detailed and thorough analysis of the state of the UK civilian nuclear energy sector and the challenges posed by the current regulatory systems. It proposes some bold ways of addressing those issues. Industry so far has welcomed the Recommendations although some may be disappointed with several of the delivery timelines. The Government response has been cautiously supportive, and we now wait to see if they take up the challenge for reform and deliver the recommendations and in line with the timelines required and set out in the Report. It is now in effect over to the UK government to pick up the mantle handed over by the Taskforce. With the right signals and policy drivers in place the UK does have an opportunity to reclaim its place at the vanguard of the international nuclear community and to take advantage of its goals-based regulatory approach.

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