1. What changes to regulatory guidance or processes would encourage regulators or duty holders to take a more proportionate approach?

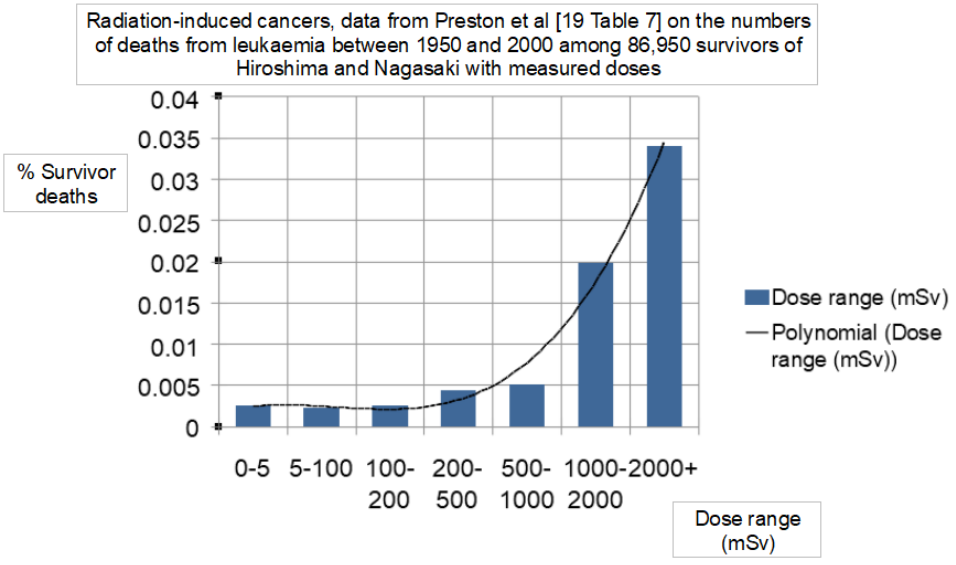
My primary concern is that a singular focus on ionising radiation overlooks broader health and safety considerations. If the task force aims for an As Low As Reasonably Practicable (ALARP) approach to ionising radiation, then a similar approach should be applied across the board to many other hazardous and environmentally dangerous substances, for example, carbon dioxide / methane which, once released to the environment, cause significant global health impacts.

a. In environmental regulation, how could EIA Regulations and Habitats Regulations, or their application on the nuclear estate, be amended to encourage proportionality? For example, could environmental cost during construction be compensated by longer term environmental gains once operation has begun, or by the wider environmental benefits of low carbon energy.

A fundamentally important parameter in any new long term energy strategy must be energy density of the fuel, which determines the proportional cost to the environment. Nuclear fuel has a greater energy density than fossil fuels, which in turn have a greater energy density than renewable sources. These densities exceed one another by several orders of magnitude, so the lowest (environmental/cost) impact per unit of generated electricity, is nuclear energy, by some margin.

b. What measures could prevent vexatious judicial reviews from driving disproportionate approaches that increase costs and delay?

b. AHARS “As High as Reasonably Safe” [Nuclear is for Life: A Cultural Revolution by Professor Wade Allison] is recommended as a more workable alternative to the over-cautious ALARP principle. I have not seen any evidence to support the Linear No Threshold as a valid dose-response model for low level ionising radiation. Below, I have plotted the different dose-response relationship between radiation and % chance of induced cancer, based on a sample of 86,955 bomb survivors’ data, and the trend line is clearly not linear:



2. How can we create an appropriate level of tension and debate between regulators and duty holders? How could constructive challenge be incentivised without increasing delay?
It is crucial that guidelines and education are founded on robust scientific evidence to ensure clarity and openness.

3. Are there examples where 'offsetting' harm can deliver more comprehensive and long-term benefits? For instance, in environmental regulation, what would be the impact of allowing organisations to pay for environmental conservation and enhancement efforts off-site? Nothing to add

4. Are there specific consents or regulations that could be consolidated into a single process to avoid duplication while ensuring clarity around procedural requirements? For instance, the Justification process (JOPPIR) is often cited as duplicative. What are the opportunities and challenges of streamlining this process by issuing immediate regulatory justification for classes of practice, such as (for example, Light Water Reactors)?
Regarding current regulations, the Ionising Radiation Regulations (IRR, 2017), Radiation (Emergency Preparedness and Public Information) Regulations (REPPIR, 2019), and Justification of Practices Involving Ionising Radiation Regulations (JoPIIRR, 2004) collectively seem excessive due to their exclusive focus on ionising radiation. I suggest either integrating their contents into broader environmental and safety laws or consolidating them into a single, comprehensive regulation for ionising radiation.

5. Are there compelling benefits to changing regulatory boundaries that would outweigh the disruption? If so, please provide evidence to support that.
Yes, more clarity would allow for focussed and better use of resources, and more job satisfaction for those in the industry.
Pre-2005 I worked in the nuclear industry, particularly with safety case work where I was required to undergo a lengthy security clearance process for working on classified documents. My work primarily involved procedural report writing (HAZOPs, Risk Assessments, Safety Cases) without a deep understanding of the underlying data or relative risks. My observation was that these safety cases offered limited practical scientific output and no deep professional knowledge was required to complete them. This highlighted a significant allocation of resources to consultancies for safety cases, which, from my perspective, did not always correlate with meaningful knowledge acquisition. In contrast, later roles with access to sensitive personal data, such as customer service, often require only a standard DBS check, suggesting a disparity in perceived risk. Furthermore, during decommissioning at one of the Magnox sites, I observed that asbestos cladding presented a greater waste disposal challenge due to its physical properties than radioactive materials. My experience also indicated a less threatening environment at the decommissioned vs heavily guarded nuclear licensed sites.

6. What changes to NSIP guidance are needed to ensure that the regulatory process fully captures all relevant costs and benefits and balances them appropriately?
For a more proportional and holistic approach to risk assessment and enforcement, I might recommend evaluating different energy options based on the following key metrics: energy density, safety (deaths per TWh), lifecycle carbon footprint equivalent per TWh, operational lifespan and reliability. This comprehensive perspective would enable decisions that reflect the full implications of each energy alternative.
I wish to raise an additional point regarding proportionality in the broader context of civil energy generation. When evaluating different energy options, the civil nuclear power sector demonstrates a globally low probability of death per TWh. In stark contrast, the fossil fuel industry, a significant emitter of carbon dioxide and a contributor to numerous climate-related deaths worldwide, does not face the same level of stringent regulatory scrutiny. Nor the renewables sector. Furthermore, the nuclear industry uniquely faces expectations such as publishing a nuclear waste inventory and including decommissioning costs upfront, which are not uniformly applied to other energy sectors.

7. Could the National Policy Statement be adapted to enable fleet approach of approvals for identical or largely similar design schemes?
Nothing to add

8. Does the current semi-urban population density criteria prevent otherwise suitable sites coming forward, and if so how should they be changed?
Nothing to add

9. What measures would create more effective collaboration and common resourcing between regulators?
Nothing to add

10. Are Strategic Workforce Plans sufficiently mature across all organisations to ensure that SQEPskills can be delivered in sufficient numbers and within the correct timescales?
Nothing to add

11. What incentives and approaches might address the cultural issues identified to drive a reduction in complexity and bureaucracy?
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12. Where is there sufficient international agreement to enable mutual recognition? Nothing to add
13. Should duty holders have mechanisms to challenge regulators when they

require significant new evidence of compliance, beyond what has been sufficient for international regulators? Nothing to add

14. What could we put in place to enable regulators to give faster approval, where such approval has already been granted in another country with similar regulatory standards? Nothing to add

15. How could the application of ALARP and cost benefit analysis be adapted to ensure that the cost of proposed safety measures is proportionate, avoiding undue delays for measures that do not significantly reduce risks?
I strongly believe that, if the decision makers insist on adhering to ALARP, then it should at least be applied to other industries, in particular to those which are not regulated in their emissions of carbon dioxide and methane (rather than ionising radiation), as these greenhouse gases are responsible for mortality, unlike ionising radiation. Existing IRR regulations on radiation levels are already stringent (e.g. 1 mSv per annum dose to the public, which is lower than background radiation in many parts of the UK), making compliance challenging. The public's acceptance of "natural" exposures like sunlight, which cause more cancers than background radiation, underscores a serious lack of proportionality and bias in current risk perceptions.
AHARS “As High as Reasonably Safe” [Nuclear is for Life: A Cultural Revolution by Professor Wade Allison] is recommended as a more workable alternative to the over-cautious ALARP.

16. Would more clearly defining tolerability be sufficient to achieve an appropriate balance between the costs and benefits of regulatory intervention, or would additional measures be required? If so, what measures would you suggest?
**For Tolerability:** I would suggest taking the advice from pages 273 and 274 of Nuclear is for Life: A Cultural Revolution by Professor Wade Allison, which states the following:
*“Today it is known that there is no substantial risk for an acute dose less than 100 mGy, nor for chronic dose rates of less than 100 mGy per month. This turns out to be close to the threshold equivalent to 60 mGy per month set by ICRP in 1934. The maximum risk-free lifelong dose is not completely clear, but present evidence suggests that it is at least 5,000 mGy. These thresholds are arguable to factors of two or three, but, used in place of the fearful ALARA/LNT regulations, they should reduce social stress and defuse the exaggerated concerns and expense related to waste and decommissioning. In this way the public would be relieved of the excessive utility charges that arise from irrational regulations that do not contribute to safety in any way. Equally they should be reassured that any diagnostic radiation scans that might be recommended are without any risk of cancer (up to about 10 per month) and their radiologists should be similarly reassured.”*