

National Policy Statement for Nuclear Energy Generation EN-7: Consultation – Response from the Nuclear Institute

About the Nuclear Institute

The Nuclear Institute is *the* professional membership body dedicated to nuclear.

Representing over 4,000 professionals at all levels across the nuclear industry, we maintain the Nuclear Professionalism Standard, an industry-wide standard that sets the benchmark for professionalism in the nuclear sector. We work with individual and organisational members to facilitate continuing professional development, provide independent recognition and accreditation of nuclear professionals, as well as offering professional registration and chartership routes.

Our national network also provides a place for the nuclear community to interact through our events programme, branch network, Young Generation Network, Special Interest Groups and our many volunteer-led activities.

Contact: policy@nuclearinst.com

1. To what extent do you agree with the modification of this approach in light of the consultation feedback: to retain the < 50 MW (electric) threshold in the existing planning framework and to review our position in the future? Please indicate the extent to which you agree or disagree with the question.

Disagree

1a. If you would like to explain your response please use the text box (max 150 words)

Whilst the Nuclear Institute (NI) agrees with supporting the development of Advanced Nuclear Technologies, retaining the 50 MW limit may not be the correct way of achieving this. Rather the NI would favour a review and modification of the NSIP and planning regime. An arbitrary power limit, may inadvertently distort the market when effects of small reactors rated either side of such a limit may be similar.

2. To what extent do you believe the draft National Policy Statement is adequately future proofed to accommodate advancements in nuclear technologies? Please indicate the extent to which you agree or disagree with the question. If you would like to explain your response please use the text box (max 150 words)

Agree

3. Are there specific planning or siting considerations that should be addressed to ensure the National Policy Statement remains flexible to deployment of nuclear in diverse locations? If you would like to explain your response please use the text box (max 150 words)

Yes

2.5.2 Risk to flooding and climate change

This is considered in a technology's safety case and assessed by the ONR as the Competent Authority. It is suggested that rather than repeat work in EN7, EN7 restricts itself to characterisation of the site with respect to climate change and whether it can be mitigated in a plant's design (and subsequently justified in its resultant safety case).

Proximity to military areas:

Within a plant's safety case, the nuclear installation with respect to accidental and intention aircraft impact must be assessed and demonstrated to the eventual operator and competent regulator, the ONR, to be safe. NI agrees that some form of pre-screening is useful and agrees that nuclear installations should ideally not be sited within a Military Air Traffic Zone (MATZ) or an Air Traffic Zone (ATZ), or a zone used for live firing exercises or air weapons ranges.

The NI also believes that nuclear installations should not be sited on approach paths for runways based at any military airfield out to a distance sufficient until any aircraft impact is within the installation's safety case assumptions and/or an approach path can clear any restricted area typically placed around nuclear installations as described in the existing Air Navigation Order.

The NI believes that the inclusion of generic military training areas (without the use of live firing) within or outside of a fixed distance (< 3 km) could be too open and could cause some projects to be unnecessarily refused on defence grounds. Whilst the NI would generally agree that installations should not be sited within safeguard zones around explosive storage areas, these matters will also be assessed in a plant's safety case.

In the future, nuclear plants may benefit from being sited close to military installations to produce synthetic aviation fuel (and other synthetic fuel), heat, steam and/or hydrogen. This would contribute to national security by reducing the length and nature of complex military supply chains and help to achieve, as an example, the aim for the RAF to become carbon neutral.

The NI feels that the approach taken to screening sites for flooding, proximity to hazardous sites and civil aviation movements with respect to what measures may be required to be taken to protect the site during the site selection phase is pragmatic.

4. To what extent do you agree with the proposal to remove the distinction between previously exclusionary and discretionary criteria? Please indicate the extent to which you agree or disagree with the question

If you would like to explain your response please use the text box (max 150 words)

Agree

5. The government currently plans to retain the Semi-Urban Population Density Criterion in EN-7. Please indicate the extent to which you agree or disagree with the inclusion **If you would like to explain your response please use the text box (max 150 words)**

2.7.7 Application of the Semi Urban Population Density criteria

NI does not agree that the screening for the SUPDC is undertaken by the HSE and taken away from the ONR and does not agree that this is prudent. Radiological consequences are calculated and demonstrated in the Nuclear Site Licence and as required under the Radiation Emergency Preparedness and Public Information Regulations (REPPPIR) for the site's emergency plan. These calculations use a source term inventory and calculated and evidenced release fraction, along with site specific factors to calculate the site's Emergency Planning Zone (EPZ) (and by extension the radiological impact on persons and the community). SMRs and AMRs will have smaller Emergency Planning Zones (EPZ) than previous reactors given their lower source term inventories and release fractions and therefore siting them closer to population will not necessarily increase the number of persons at risk in the unlikely event of nuclear materials crossing the nuclear site boundary. Under REPPPIR the Local Authority, assisted by ONR sets the EPZ boundaries based on a substantiated technical report from the operator. The inclusion of HSE is felt to be unnecessary and may lead to increased risk of permissioning delay. Newer reactors may need to be positioned closer to population for the production of heat or other energy vectors. The NI agrees that early determination as described in 2.7.9 is prudent for developers, but simply assessing against the SUPDC is likely to be overly conservative for the reasons previously described.

6. We are open to revising the Semi-Urban Population Density Criterion in the future. How should this criterion change in the future to better support the deployment of advanced nuclear technologies, and what evidence supports your suggestion? Please reference your sources. Please use the text box to answer (max 500 words).

7. If it is not already addressed elsewhere (for example in EN-1 and the Planning Inspectorate Nationally Significant Infrastructure Project Guidance), are there any specific areas of the draft EN-7 where further clarity or guidance is needed to help ensure successful implementation by developers, planners, and regulators? If you would like to explain your response please use the text box (max 150 words)

8. Would additional support or information from the government be beneficial and assist developers intending to apply for Development Consent in implementing EN-7 and proceeding through the Development Consent Order pre-application process? If you would like to explain your response please use the text box (max 150 words)

2.4.2

The introduction of the Infrastructure Bill (Wales) could provide confusion and an uneven playing field for developers, where in one set of circumstances, a project could be permissioned effectively by Welsh Government and for another, by UK Government.

9. If you wish to be kept informed of the development of the supplementary information to the National Policy Statement, please share your contact details (email address preferable) in the text box provided so that we can seek your views (max 150 words).

policy@nuclearinst.com

10. Please identify the main sector or interest you represent in relation to the siting of new nuclear power stations(Required)

Non Government Organisation

10a. Please use the text box below to state any other sectors or interests you represent (max 150 words)

Professional membership body for nuclear