Department for Energy Security & Net Zero

A National Policy Statement for new nuclear power generation

Consultation on the new approach to siting beyond 2025

Closing date: 10 March 2024 @ 23:59

January 2024

Any enquiries regarding this publication should be sent to us at:
newnuclearnps.consultation@energysecurity.gov.uk

Foreword

Cheap and plentiful supplies of low-carbon energy are fundamental to Britain's long term economic growth. The global pandemic and Putin's illegal invasion of Ukraine have caused unprecedented spikes in global energy prices and have highlighted/shown the need for domestic production of low carbon technologies to generate growth and decrease the cost of energy bills. The creation of the Department for Energy Security & Net Zero this year is a clear statement of intent by this government to ensure the UK's energy system is strong, resilient and continues to decarbonise.

Nuclear power will play a key role in facilitating abundant and inexpensive low carbon energy. The launch of Great British Nuclear[1] in March has demonstrated this government's commitment to nuclear and advanced nuclear technologies. The British Energy Security Strategy sets out an ambition to achieve up to 24 Gigawatts (GW) of nuclear power capacity by 2050 to provide up to approximately 25% of the UK's projected electricity needs.

The Civil Nuclear Roadmap sets out our ambition and the steps we are taking to enable its delivery. In the Civil Nuclear Roadmap we are confirming our commitment to increase deployment of civil nuclear power and setting out how government and industry will need to work together to reach this ambition. We want to provide a clear signal to industry, setting out how we expect nuclear deployment to happen, the major decisions government will make in the future, and the role government will take in supporting and enabling this build programme. To achieve the UK's nuclear ambitions, additional and new sites will be required, so we will need greater flexibility in the site selection process to enable new technologies.

The current nuclear National Policy Statement (NPS), EN-6, was published in 2011 and provides a framework for assessing development consent applications for new nuclear power stations expected to deploy by the end of 2025. It sets out the need for new nuclear energy and provides guidance to the Planning Inspectorate, developers, and the Secretary of State in their consideration of applications.

At the time EN-6 was designated, the only commercially available nuclear technology was Gigawatt (GW) scale and a time limit for nuclear projects at specific locations was thought to be the best way of ramping up deployment plans. EN-6 successfully facilitated the granting of a Development Consent Order (DCO) for a new nuclear power station at Hinkley Point C in March 2013 and development consent was granted for Sizewell C in 2022.

We now need to produce a new nuclear NPS, not only to provide an effective planning framework beyond 2025 but also to take advantage of the advanced nuclear technologies that will come onstream and provide the flexibility needed to meet the UK's nuclear ambitions. EN-6 will continue to be an important and relevant consideration in any planning

[1] We have launched Great British Nuclear (GBN) as part of our Powering Up Britain plan, an arms-length body responsible for helping deliver new nuclear projects – further information can be found at https://www.gov.uk/government/organisations/great-british-nuclear

process for projects at the sites listed in EN-6, as well as amendments to DCOs for projects that were consented under EN-6, when the new NPS is designated.

This consultation represents the first step in the nuclear NPS revision process to provide clear guidance on siting of nuclear power stations beyond 2025 and will give industry and investors the confidence they need to deliver projects at speed. Our robust regulatory processes and criteria that inform considered decisions on siting of nuclear power stations, remain largely unchanged and consistent with EN-6. The policy shifts and developments that are proposed, only impact upon the pre-application stage of the planning process and will not change the planning regime or have any effect on the current public consultation process, nor safety, security and environmental protection offered by other regulatory regimes. The views and suggestions gathered through this consultation will ultimately shape the criteria and assessment process for new nuclear projects, which will be incorporated into the new nuclear NPS, EN-7. We intend to publish the nuclear NPS EN-7 itself for consultation in 2024.

As well as providing a reliable source of low carbon electricity, nuclear power has long been economically important to many regions in the UK and can help support the government's objective to spread opportunity more equally across the UK. We would welcome responses from any communities that think they may benefit from the social and economic opportunities that new nuclear power can deliver, especially where there is former industrial and brownfield land that may be suitable for redevelopment.

Bringing forward an NPS for new nuclear beyond 2025 will support development decisions, improve investor confidence, and provide the greater certainty needed to enable the growth of the UK nuclear sector. We look forward to hearing your views and comments on this consultation.

Contents

General information

Why we are consulting

The current suite of energy National Policy Statements (NPSs) were designated by the Department of Energy and Climate Change in 2011. It includes the overarching energy NPS (EN-1)[2] and a range of technology-specific NPSs (EN-2 to EN-6)[3], including the nuclear-specific NPS (EN-6).

In December 2020, the government launched a review of the energy NPSs to ensure they reflected government's energy priorities as set out in the Ten-Point Plan[4] and Energy White Paper[5]. Following the review, a consultation was launched to update EN-1 to EN-5 in September 2021. It was separately concluded that a new nuclear NPS for nuclear fission projects deployable after 2025 was required.

Since then, the government has published further documents setting out relevant policy. In October 2021, the Net Zero Strategy: Build Back Greener[6] was published, setting out our plan for reducing reliance on fossil fuels and making the transition to low carbon energy consistent with our net zero commitments. In April 2022, the government published the British Energy Security Strategy (BESS)[7] and, in March 2023, this was followed by Powering Up Britain[8], which set out several commitments related to energy, planning reform and the energy NPSs. Powering Up Britain included a commitment to consult on the proposed approach to siting new nuclear projects later in 2023 and this document fulfils that commitment.

The purpose of this consultation is to begin the process towards designating a new nuclear NPS (EN-7, reflecting today's planning framework), applicable to nuclear power stations expected to deploy[9] beyond the EN-6 2025 deployment limit. Some material updates to the existing policy for siting nuclear power stations have been proposed and the government wishes to gather views on these changes ahead of finalising the policy. This consultation focuses on those material changes in policy before a further formal consultation on the new draft NPS is launched in 2024.

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[2] https://assets.publishing.service.gov.uk/media/5a79522de5274a2acd18bd53/1938-overarching-nps-for-energy-en1.pdf
[3] https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/national-policy-statements/
[4] UK Government (2020). The Ten Point Plan for a Green Industrial Revolution. Available at: https://www.gov.uk/government/publications/the-ten-point-plan-for-a-green-industrial-revolution/title
[5] UK Government (2020). Energy white paper: Powering our net zero future. Available at: https://www.gov.uk/government/publications/energy-white-paper-powering-our-net-zero-future/energy-white-paper-powering-our-net-zero-future-accessible-html-version
[6] UK Government (2021). Net Zero Strategy: Build Back Greener. Available at: https://www.gov.uk/government/publications/net-zero-strategy
[7] UK Government (2022). British energy security strategy. Available at: https://www.gov.uk/government/publications/british-energy-security-strategy/british-energy-security-strategy
[8] UK Government (2023). Powering up Britain. Available at: https://www.gov.uk/government/publications/powering-up-britain
[9] As is the case for the purpose of applicability of EN-6, government considers "deployment" to mean the point when a generating station first begins to feed the electricity it generates to the electricity transmission network, noting this will likely be at a point before full commercial operation.

Consultation details

Issued: 11 January 2024

Respond by: 10 March 2024 @ 23:59

Enquiries to: newnuclearnps.consultation@energysecurity.gov.uk

(Please do not send consultation responses to this email address, see below details on responding via Citizen Space)

Consultation reference: New Nuclear NPS Siting

Audiences: The government wants to hear from members of the public, industry, non-governmental organisations, interested public bodies and organisations, and nearby states.

Territorial extent:

This consultation relates to the exercise of powers in England and Wales. Energy policy is generally a matter reserved to UK Ministers but the powers relevant to this consultation do not apply in Scotland and Northern Ireland because the legal power to consent to the construction of power stations more than 50MW of capacity has been executively devolved to Scottish Ministers and is also devolved in Northern Ireland. Additionally, the Wales Act 2017 gives Welsh Ministers the responsibility to consent the construction of power stations with a generating capacity between 10MW and 350MW.

How to respond

We are inviting responses to this Consultation, where possible, via the online e-consultation platform, Citizen Space.

In this Consultation, the government wants to hear from members of the public, industry, non-governmental organisations, interested public bodies and organisations, and nearby states. When responding, please state whether you are responding as an individual or representing the views of an organisation. If you are responding on behalf of an organisation, please clarify the interests represented by the organisation and, where applicable, how you assembled the views of members.

Your response will be most useful if it is framed in direct response to the questions posed, although further comments and evidence are also welcome. When considering responses to this consultation, the government will give greater weight to responses that are based on argument and evidence, rather than simple expressions of support or opposition.

Consultations receive a high level of interest across many sectors. Using the online service assists our analysis of the responses, enabling more efficient and effective consideration of the issues raised. Therefore, **we strongly encourage responses via Citizen Space.** Please contact us if you intend to respond using an alternative method.

Respond online at: https://energygovuk.citizenspace.com/energy-security/new-nps-for-siting-nuclear-power-generation/

Alternatively, discuss with us alternative response methods:

Email or write to New Nuclear NPS Team:

Email: newnuclearnps.consultation@energysecurity.gov.uk

Address: New Nuclear NPS Team
Department for Energy Security and Net Zero
3-8 Whitehall Place
London
SW1A 2AW

Confidentiality and data protection

Information provided in response to this consultation, including personal information, may be disclosed in accordance with UK legislation (the Freedom of Information Act 2000, the Data Protection Act 2018, and the Environmental Information Regulations 2004).

If you want the information you provide to be treated as confidential, please tell us but be aware that we cannot guarantee confidentiality in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not be regarded by us as a confidentiality request.

We will process your personal data in accordance with all applicable data protection laws. See our privacy policy.

We will summarise all responses and publish this summary on GOV.UK. The summary will include a list of names or organisations that responded, but not personal names, addresses or other contact details.

Quality assurance

This consultation has been carried out in accordance with the government's consultation principles.

If you have any complaints about the way this consultation has been conducted, please email: bru@energysecurity.gov.uk

Public Sector Equality Duty

In reviewing these policies and developing these consultation proposals we are considering the needs of persons with protected characteristics, as defined by the Equality Act 2010: age; disability; gender reassignment; pregnancy and maternity; race (this includes ethnic or national origins, colour or nationality); religion or belief (this includes lack of belief); sex; sexual orientation; marriage and civil partnership.

At this stage, because of the nature of the policy area and subject of the consultation, we have not identified any opportunities to eliminate unlawful discrimination, harassment, victimisation or any other conduct prohibited by the Equality Act 2010. Neither have we identified any opportunities to advance equality of opportunity or foster good relations between those who share a protected characteristic and those who do not. However, if there is any information you believe we should consider as part of this assessment then please include it with your consultation response.

Environmental principles policy statement

In reviewing these policies and developing these consultation proposals we are considering the principles committed to in the Environmental principles policy statement.

1. Executive Summary

1.1 A massive revival of nuclear power is underway in the UK, and we are at the forefront of a global race to develop cutting-edge technologies to rapidly deliver cleaner, cheaper, and more secure energy. The British Energy Security Strategy (BESS) sets out an ambition to achieve up to 24 Gigawatts (GW) of nuclear capacity by 2050 to provide up to approximately 25% of the UK's projected electricity needs. The purpose of this consultation is to begin the process of designating a new National Policy Statement (NPS), EN-7, applicable to nuclear power stations expected to deploy after 2025 for GW scale nuclear power stations, Advanced Modular Reactors (AMRs) and Small Modular Reactors (SMRs). The energy NPSs[10] set out the government's policy for the delivery of energy infrastructure and provide the legal framework for planning decisions for Nationally Significant Infrastructure under the Planning Act 2008.

1.2 The first step towards the proposed nuclear NPS, EN-7, is this consultation on the approach for assessing the potential suitability of sites for the deployment of new nuclear power stations. In summary, this consultation sets out:

- A criteria-based approach to new nuclear deployment, with updated criteria that constrain where development can occur. Identification of specific sites for deployment is no longer proposed.
- The removal of the deployment time limit for new projects to open up more siting opportunities and facilitate longer term market development.
- The siting policy for the deployment of SMRs, AMRs, alongside the GW-scale projects.
- Alongside this consultation, the government is also publishing a draft scoping report on the Appraisal of Sustainability (AoS) and draft methodology report on the Habitats Regulation Assessment (HRA)[11]. These reports propose how the AoS and HRA will be undertaken, the level and type of information to be covered in the assessments and how these will be integrated into the development of EN-7.

1.3 These changes will deliver the ongoing flexibility needed to ensure there are enough sites to fulfil the country's nuclear ambitions, while ensuring that siting of new nuclear power stations is appropriately constrained and that nuclear power stations are only sited in suitable locations.

[10] There are currently six NPSs relevant to energy: one overarching energy NPS (EN-1) and five technology specific NPSs (EN-2 to EN-6), including one on Nuclear Power (EN-6), which must be read with EN-1.

[11] It is required that the government undertakes an AoS and an HRA to inform the proposed EN-7.

2. Background

2.1 UK nuclear power generation

2.1.1 The UK has a longstanding history in pioneering nuclear technology. Today, nuclear power remains crucial to the UK's energy security as well as our plans for energy independence, energy diversification, economic growth, job creation and technology advancement, while reducing our reliance on fossil fuels and making the transition to a low carbon, affordable energy mix. Electricity generation from low carbon sources is an essential element of the transition to net zero carbon emissions by 2050 and meeting our statutory targets for the sixth carbon budget (CB6).

2.1.2 The conflict in Ukraine has emphasised the increased importance of security of our energy supply and domestic energy resilience. This priority is complementary to our legal and international net zero commitments. To meet these objectives, we must decarbonise the power sector by 2035, subject to security of supply. Transforming the energy system to low carbon generation will ensure secure and reliable supply, and affordable bills for households and businesses.

2.1.3 In March 2023, the Powering Up Britain strategy set out plans to increase the deployment of civil nuclear power stations and emphasised the government's ambition of achieving up to 24 Gigawatts (GW) of new nuclear by 2050. The overarching energy National Policy Statement (NPS) EN-1, originally published in July 2011 with an updated draft published for consultation in March 2023, makes clear the government's view that nuclear power generation is a low-carbon, proven technology that will play an important role as we diversify and decarbonise our sources of electricity and increase the resilience of the UK's energy system. Both the original and updated EN-1 also included a detailed analysis of the future need for electricity generation, which made clear that new nuclear power has an important role to play in the UK's future energy mix [12.]

2.1.4 Of the UK's five current generating nuclear power stations, all but one is due to cease generation by 2028[13]. In line with the urgent need for low carbon energy set out in the overarching energy NPS, EN-1, we need new nuclear power stations to meet the UK's energy and low carbon objectives. Nuclear power stations provide continuous, reliable, safe low-carbon power with an estimated lifetime of 60 years, using a much smaller amount of land relative to other low carbon generation technologies such as wind and solar. They produce no direct emissions during operation and have indirect life cycle greenhouse gas emissions comparable to offshore wind. Nuclear provides security of supply benefits, can offer broader system benefits such as low carbon hydrogen or heat and has other applications such as medical isotope production.

12 Based on independent analyses, the government believes that carbon emissions from a new nuclear power station are likely to be within the range of 7-22g/kWh. This is in line with research published by the Sustainable Development Commission and the IAEA. This is comparable to the lifecycle CO2 emissions from wind power and much less than fossil fuelled plant.
13 Only Sizewell B (1198 MW) is expected to continue generation beyond 2030.

2.1.5 The government remains committed to large scale nuclear projects, such as Hinkley Point C and Sizewell C. The government also recognises that emerging Advanced Modular Reactor (AMR) and Small Modular Reactor (SMR) technologies provide exciting opportunities for the UK.

2.1.6 SMRs are generally smaller versions of conventional water-cooled nuclear reactors, constructed in a modular fashion away from the site in which they are used. There is a wide range of new SMR reactor technologies under development around the world, which have a power output approximately a fifth to a third of larger, conventional reactors. Many designs have the potential for a range of applications beyond low-carbon electricity generation, including production of hydrogen, direct heat for industrial or domestic use and nuclear waste management.

2.1.7 AMRs are the next generation of nuclear power, using novel and innovative fuels and coolants to generate electricity as well as other applications such as heat and hydrogen. They take advantage of the same modular-building principles as SMRs, making them more flexible to deploy. A range of technologies is being developed globally, and the UK's AMR Research, Development & Demonstration (RD&D) programme is currently focused on High Temperature Gas Reactors (HTGRs). This RD&D programme aims to enable an AMR demonstration by the early 2030s at the latest.

2.2 The Planning Regime and National Policy Statements

2.2.1 A good planning policy framework is critical for determining where nuclear power stations can and cannot be built, and then facilitating deployment in those areas that meet the criteria. This is supplemented by the Civil Nuclear Roadmap, which gives developers and the planning regime the broad deployment trajectory over the coming years.

2.2.2 Nationally Significant Infrastructure Projects (NSIPs) require a planning permission known as 'development consent' under procedures governed by the Planning Act 2008. This covers nationally important infrastructure such as transport, water and energy. For energy, this includes nuclear generation as well as other forms of generation, transmission and storage. For all such projects, the Planning Inspectorate (PINS) examines the application, taking evidence from the applicant and from interested parties, in a robust process to ensure that all impacts - both positive and negative - are considered and weighed against each other.

2.2.3 NPSs have a crucial role in this regard by setting out the national needs case for the relevant infrastructure, as put forward by government and endorsed by Parliament. Following their examination and engagement with all interested parties, PINS will make a recommendation to the relevant Secretary of State, who will decide whether to grant or to refuse development consent. For energy projects including nuclear, this is the Secretary of State for Energy Security and Net Zero.

2.2.4 The Planning Act 2008 applies to England and Wales, with the Wales Act 2017 devolving competence for the consenting of electricity generating stations with an installed output of between 10 Megawatts (MW) and 350MW (both on and offshore)

to the Welsh Ministers. The Planning Act 2008 and system of Nationally Significant Infrastructure consenting do not apply to Scotland or Northern Ireland.

The Energy National Policy Statements

2.2.5 The energy NPSs set out planning policy for national energy infrastructure and provide the framework for decision-making on applications for development consent for energy NSIPs. The overarching NPS for Energy (EN-1) sets out the needs case for significant energy infrastructure, whilst the other five NPSs (EN-2 to EN-6) set out planning policy for specific energy technologies.[14]

2.2.6 Currently, EN-6, taken together with EN-1, provides the framework for development consent decisions taken on planning applications for new nuclear power stations that will deploy by the end of 2025.

2.2.7 To ensure consenting decisions are fair, efficient and effective, it is crucial to produce an NPS that provides a clear statement of need for particular infrastructure as well as clear guidance to PINS and the regulators. This is recognised in the government's Action Plan for Nationally Significant Planning Reform, published in February 2023[15]. This plan emphasises the crucial role of having up-to-date and clear NPSs across all relevant sectors, a point emphasised by the National Infrastructure Commission in its report published in April 2023.[16]

2.2.8 Following the publication of the British Energy Security Strategy (BESS) in 2022, material changes were made to the draft EN-1 that required further consultation. The consultation ran from March to June 2023 and the government is now considering the responses. Subject to the will of Parliament, the government aims to designate the updated NPS as soon as the statutory laying in Parliament has been completed.[17].

2.2.9 Last year, the government also launched an action plan for reforming NSIPs and a consultation on operational reforms to the NSIP consenting process[18]. These reforms aim to ensure the planning system overall can support our future

[14] EN2-6 encompasses various energy types, with EN-2 dedicated to Fossil Fuel Electricity, EN-3 focusing on Renewable Energy Infrastructure, EN-4 dealing with Gas Supply Infrastructure and Gas and Oil Pipelines, and EN-5 addressing Electricity Networks Infrastructure. EN-6 is dedicated to Nuclear Power Generation.

[15]UK Government (2023) Nationally Significant Infrastructure Projects (NSIP) reforms: action plan. Available here: https://www.gov.uk/government/publications/nationally-significant-infrastructure-projects-nsip-reforms-action-plan

[16] National Infrastructure Commission (2023). Infrastructure planning system. Available here: https://nic.org.uk/studies-reports/infrastructure-planning-system/

[17]UK Government (2023). Planning for new energy infrastructure: revisions to National Policy Statements. Available here: https://www.gov.uk/government/consultations/planning-for-new-energy-infrastructure-revisions-to-national-policy-statements

[18]UK Government (2023). Consultation on operational reforms to the Nationally Significant Infrastructure Project (NSIP) consenting process. Available here: https://www.gov.uk/government/consultations/operational-reforms-to-the-nationally-significant-infrastructure-project-consenting-process/consultation-on-operational-reforms-to-the-nationally-significant-infrastructure-project-consenting-process

infrastructure needs by making the system better, faster, greener, fairer, and more resilient.

2.2.10 The planning policy framework is an integral part of the process of developing a new infrastructure project. There is also a range of other regulatory processes, including permitting, licensing, and regulatory justification, that interconnect with the planning process and must also be completed by developers before a nuclear power station can begin operation. Further detail on these processes is set out in Section Five.

2.3 The nuclear National Policy Statement

2.3.1 EN-6 was designated in 2011 and sets out the government's planning policy for new nuclear power. It lists eight sites in England and Wales considered to be potentially suitable for the deployment of nuclear power stations by the end of 2025. These sites are: Bradwell, Hartlepool, Heysham, Hinkley Point, Oldbury, Sellafield (also known as Moorside), Sizewell and Wylfa. The sites were selected following an assessment of developer-nominated sites against strategic siting criteria. At the time, the only commercially credible nuclear technology was large-scale (GW), and site suitability was selected on this basis. In March 2013, EN-6 successfully facilitated the granting of a DCO for a new nuclear power station at Hinkley Point C. Development consent was also granted for the Sizewell C nuclear power station in July 2022.

2.3.2 In 2017, the government proposed updated siting criteria and published these for public consultation alongside the proposed process for assessing and designating potential sites. At the time, the focus remained on GW technology with a proposal to develop a new NPS that carried forward the eight sites listed in EN-6 (minus Hinkley Point, which had already obtained development consent), with a new deployment time limit of 2035 and the launch of a new site nominations process in the mid-2020s. The government published its response to the consultation in July 2018. However, further work on developing a new nuclear NPS was paused during development of the 2020 Energy White Paper, which set new net zero targets and required all energy NPSs to be reviewed.

2.3.3 There have been significant changes in the nuclear landscape since the designation of EN-6 and the 2017/18 consultation. There is a credible prospect that advanced nuclear technologies will be deployed within the next decade. The 2021 review, therefore, concluded that a new nuclear NPS should be designated in due course for nuclear fission projects deployable after the EN-6 deployment time limit of 2025, potentially including SMRs and AMRs.

2.3.4 Whilst this consultation proposes a shift in the policy approach to that envisaged in 2017, due to the increased range of nuclear technologies, much of the input to the 2017/18 consultation, particularly with regard to site assessment criteria, remains pertinent to ongoing policy development in this area. This has been considered in the new proposed approach detailed in Sections Four and Five.

2.3.5 In 2021, a review of all energy NPSs concluded that EN-6 should not be withdrawn or amended because it still has effect for projects consented under it, including

associated amendments to Development Consent Orders (DCOs). EN-6 also remains a material consideration in planning decisions on nuclear projects deployable after 2025. The draft EN-1 and a Written Ministerial Statement in 2017 reaffirm both the needs case for nuclear in the UK's energy mix and the ongoing importance and relevance of EN-6.

2.3.6 The Powering Up Britain strategy committed the government to consulting on an overall new siting strategy for nuclear power, intended to be a first step towards the designation of EN-7.

Position of the current EN-6 beyond 2025

2.3.7 The nuclear NPS EN-6 currently remains in force in its entirety for use in development consent applications for new nuclear power stations on sites listed in EN-6 that are capable of deployment by the end of 2025 and will continue to have effect for amendments to DCO applications for those sites when EN-7 becomes designated. For this reason, the government does not propose to withdraw EN-6. EN-6 also remains a material consideration in any planning decision on nuclear power stations that will deploy after 2025 under Section 105 of the Planning Act 2008[19].

2.3.8 The government is confident that EN-6 incorporates information, assessments and statements that will continue to be important and relevant to the Secretary of State's development consent decisions for projects that will deploy after 2025. This includes the assessments that informed the selection of the eight sites listed in EN-6, which the government believes remain potentially suitable for new nuclear development beyond 2025. Whilst EN-7 will be the primary basis for development consent decisions on nuclear projects that will deploy after 2025, subject to its designation by parliament, the government would expect EN-6 to remain a material consideration in any development consent decision for a project at any of the sites listed in EN-6.

2.3.9 While any proposed project at an EN-6 listed site would need to be considered against the updated EN-7 criteria, in practice we recognise that these sites are likely to retain certain advantages, such as existing site characterisation work, skilled workforces and grid connections. The government welcomes continued interest in these sites.

2.3.10 The overarching NPS for Energy EN-1 also includes statements of the need for nuclear power, as well as environmental and other assessments that continue to be relevant for such projects, which apply directly to development consent decisions for nuclear power stations. Furthermore, the revised draft EN-1 would have full effect for development consent decisions on energy infrastructure projects with or without a technology-specific NPS in force. In deciding whether to grant consent to such a development, the Secretary of State would also, under section 105(2)(c) of the Planning Act 2008, have regard to the content of EN-6. Where there is no relevant

[19] Planning Act (2008). Available here: https://www.legislation.gov.uk/ukpga/2008/29/contents

change in circumstances, it is likely that significant weight would be given to the policy in EN-1 and EN-6.

2.3.11 This outcome of this consultation and the draft EN-7 will also be important and relevant considerations under section 105(2)(c) of the Planning Act 2008 when a decision is taken on an application for development consent for any applications submitted before EN-7 is finalised and designated. Subject to its designation by parliament, EN-7 will supersede EN-6 and be fully effective for development consent decisions on applications for new nuclear power stations, although the government expects EN-6 to remain important and relevant to any decisions for projects at any of the sites listed in EN-6.

3. The Policy Proposals

3.1 Introduction

3.1.1 The following section describes the main policy proposals for siting new nuclear power stations in the UK beyond 2025 and draws particular attention to how they differ from the existing nuclear siting policy in EN-6. It also sets out proposed changes to the Planning Act 2008 to expand the definition of nationally significant nuclear energy projects to ensure that, in future, the planning system considers all nuclear fission projects in a unified and consistent manner.

3.1.2 The government's plans to increase the deployment of civil nuclear power and the credible prospect of new advanced nuclear technologies being deployed within the next decade necessitates a new approach to siting new nuclear power stations.

3.1.3 As the revitalisation of the nuclear industry in the UK gets underway, a new planning policy is proposed to facilitate the deployment of new technologies and enable development on new sites to support the UK's energy security and climate goals. Most of the criteria that require consideration in the siting of nuclear developments will remain unchanged and remain consistent with EN-6. The key changes and policy proposals are outlined in this section and summarised in the bullet points below:

- **Broadening the scope of EN-7 to apply to both Gigawatt (GW) scale nuclear projects (exceeding 1000MW of nuclear capacity) and Small Modular Reactors (SMRs),** which typically have a generation capacity below 500 MW. Inclusion of smaller modular reactors marks a key change from EN-6. Advanced modular reactors (AMRs) that generate both heat and power will also be included within the scope of EN-7.

- **Empowering developers[20] to select sites for nuclear development, using criteria set in the NPS, to open up more siting opportunities whilst constraining development in unsuitable areas.** In line with the other energy National Policy Statements (NPSs), this will put the developer at the forefront of site selection and empower developers to assess the suitability of potential sites for deployment based on the site assessment criteria in EN-7. The proposed assessment criteria are broadly similar to the strategic criteria in EN-6 and encompass nuclear safety and security considerations, environmental impacts and operational requirements.

- **Removing deployment time limits in the NPS on the deployment of new nuclear power stations to better support long-term planning.** The government believes that this would facilitate the development of a longer-term pipeline of nuclear developments to support the UK's nuclear ambitions.

[20] In this document references to developer(s) may mean an independent nuclear developer and/or Great British Nuclear acting as a nuclear developer

3.1.4 Nuclear developments will remain subject to the robust regulatory controls that ensure, amongst other things, public safety, and environmental protection. The relevant permits and licenses will continue to be required, alongside Regulatory Justification[21] and the recommended completion of a Generic Design Assessment (GDA)[22]. The public engagement and consultation processes set out in the national infrastructure planning regime will also continue to apply.

3.1.5 We will ensure that the approach taken aligns with the existing Environmental Impact Assessment process, as well as the proposed Environmental Outcome Reports[23], and will provide further details on this in the draft EN-7 document.

3.2 Key policy proposals

Expanding the technology coverage of the new NPS

3.2.1 EN-6 was designated in 2011 at a time when the only commercially available technology was large GW-scale reactors. Since then, nuclear reactor technology has developed rapidly and there is now a realistic potential for the deployment of Advanced Modular Reactors (AMRs) and Small Modular Reactors (SMRs) within the next decade. The government considers that GW-scale, SMRs and AMRs are needed to come forward to ensure the UK meets its energy ambitions. Therefore, the intention is that EN-7 provides flexibility for GW-scale nuclear and advanced nuclear projects to be deployed on any site that meets the siting criteria. We now have a greater understanding of these new technologies, and it is considered that planning issues for new nuclear should be considered in a joined-up way in the new NPS.

3.2.2 We recognise that there are differences between these advanced technologies and traditional GW-scale power stations, most notably reactor size and the potential use of alternative cooling systems. However, our assessment is that SMR and AMR developers will need to consider similar concerns around nuclear safety and security, environmental impacts and operational requirements as those for GW-scale

[21] Regulatory Justification is a high-level, non-site-specific assessment where practices using ionising radiation are grouped into 'classes' or 'types of practices. Pre-application advice will be provided by the Department for Energy Security and Net Zero through the regulatory justification application centre. The Justifying Authority for nuclear plants must be 'functionally separate' from the Department for Energy Security and Net Zero (DESNZ), so whilst DEFRA may seek advice on process, DESNZ must not be involved in the decision-making process. Justification can be obtained prior to the other regulatory processes. Further information is available at: https://www.gov.uk/government/publications/regulatory-justification-decisions-on-nuclear-reactors.

[22] Generic Design Assessment is a voluntary de-risking process where nuclear regulators work together to ensure any new nuclear power stations built in England & Wales meet high standards of safety, security, environmental protection, and waste management. Further information is available at https://www.onr.org.uk/new-reactors/guidance-assessment.htm.

[23] UK Government (2023). Government sets out adaptation programme to tackle climate impact. Available at: https://www.gov.uk/government/news/government-sets-out-adaptation-programme-to-tackle-climate-impact A proposed new system of environmental assessment. Available at: https://www.gov.uk/government/consultations/environmental-outcomes-reports-a-new-approach-to-environmental-assessment/environmental-outcomes-report-a-new-approach-to-environmental-assessment

power stations. Given these similarities, we have not identified a need for a separate set of siting criteria or a separate NPS for SMRs and AMRs.

3.2.3 **EN-7 will, therefore, set out, for the first time, a planning policy that applies to sites for both GW-scale nuclear projects (exceeding 1000 Megawatts (MW) of nuclear capacity) and SMRs**, which typically have a generation capacity below 500 MW. This planning policy framework will also apply to AMRs that generate both heat and power.

3.2.4 It should be noted that research reactors with a generating output of less than 50MW in England and reactors that are solely used to produce medical radioisotopes would ordinarily continue to be consented through the local planning route. EN-7, like EN-6, will only include energy-generating stations within its scope.

3.2.5 Furthermore, this siting consultation and the proposed EN-7 is focused solely on nuclear fission. The government has committed to producing a separate NPS for fusion energy due to the fundamental differences in technology.

Question 1: EN-6 applies only to GW scale projects. In this consultation we propose EN-7 applies to GW scale projects, and in addition SMRs and AMRs. What is your view on the government proposal to expand the range of technologies covered by the new nuclear NPS?

Please indicate the extent to which you agree or disagree with the question and provide any further comments.

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly Agree
- Not enough information
- Please explain your answer (free text, 300 words)

Criteria-based approach to new nuclear deployment

3.2.6 EN-6 was unique among the suite of energy NPSs in that it designated eight specific geographical locations potentially suitable for nuclear deployment by 2025. At that time, directing developers' focus towards a fixed list of sites was considered the best way of delivering the urgent need for new nuclear power to support the UK's energy security and climate goals. However, while EN-6 enabled development consent for the Hinkley Point C project and informed the decision to grant consent to Sizewell C, fewer projects than originally anticipated have been consented under EN-6.

3.2.7 In line with the urgent need for low carbon energy set out in the overarching energy NPS, EN-1, the government believes we need new nuclear and that nuclear should contribute as much as possible to the UK's need for new electricity capacity. Although it is not possible to predict whether there will be one or more reactors at each of the eight sites listed in EN-6, a single reactor at each of the eight sites would

result in up to 14GW of nuclear capacity, depending on the technology chosen[24]. Therefore, additional sites are likely to be needed to meet the UK's nuclear ambition to reach up to 24GW of nuclear capacity by 2050.

3.2.8 What is clear is the specific sites best suited for advanced nuclear technologies may differ from those that are suitable for large-scale GW plants. Some AMRs and SMRs, for example, will have different site footprints and water-cooling requirements compared with GW plants, which offers the potential for nuclear developments in some non-coastal locations. Technological advances also enable the efficient production of other outputs alongside electricity and these alternative end-uses could drive consideration of new sorts of sites. For example, there could be potential benefits to siting reactors that produce high-temperature heat close to industrial sites that require the heat to decarbonise their operations. Therefore, the intention is for the new NPS to be sufficiently flexible to enable a variety of siting options. Given the number of possible deployment scenarios for smaller and more varied nuclear facilities to support a range of end-uses, greater ongoing flexibility is required in the site selection process. The proposed policy, therefore, is that EN-7 will not designate or specify locations for new nuclear development; instead a criteria-based approach is proposed. However, we believe that the sites designated in EN-6 will retain inherent positive attributes that make them suitable for consideration for development and we welcome interest in these sites from developers.

3.2.9 This does not mean that development can occur everywhere. Siting will continue to be constrained by robust criteria that determine where development can occur. It remains crucial that siting considerations continue to encompass nuclear safety and security factors, environmental impacts including climate resilience, operational requirements, alongside other criteria, such as population density, that constrain where development can occur. In line with good planning policy, the government particularly encourages applications to develop on former industrial and brownfield land.

3.2.10 The proposed move to a criteria-based approach for new nuclear development means that the UK Government no longer considers it appropriate to conduct a site nomination and strategic siting assessment process to identify potential sites. The government believes that developers are better placed to locate and then screen potentially suitable sites using the site assessment criteria set out in EN-7. The government-led strategic siting assessment was always a supplement to the DCO process and not a replacement for the detailed project-level considerations that is required as an application progresses through the planning system. By removing this formal step, we have simplified the process, enabling developers who have the detailed knowledge to focus these assessments on a specific project, with a particular technology, within the boundary of a selected site. A criteria-based process is expected to increase market flexibility and innovation, with developer knowledge providing a more efficient screening and assessment process for siting the wider range of nuclear technologies that could become available.

[24] UK Government (2011). Overarching National Policy Statement for Energy (EN-1). Available at: https://assets.publishing.service.gov.uk/media/5a79522de5274a2acd18bd53/1938-overarching-nps-for-energy-en1.pdf

3.2.11 **In future, it is therefore expected that developers will be empowered to undertake initial screening of sites at the pre-application stage, with advice from the regulators as appropriate**. The ONR will advise on the application at the relevant stages through PINS processes. As they do now, nuclear developers will need to address specific impacts arising from their projects in their DCO applications. Further information on the intended process for site selection is considered in Sections Four and Five.

3.2.12 **There will be no specific nominations window for new sites. Developers may put forward an application whenever it is considered ready for submission, following consultation with relevant organisations, including the PINS, regulators, and statutory agencies.**

3.2.13 This proposed approach to siting new nuclear projects would bring EN-7 in line with all the other energy NPSs. EN-7 will also align with, and refer to, the enhanced needs case set out in the revised EN-1.

3.2.14 Both the Appraisal of Sustainability (AoS) and the Habitats Regulations Assessment (HRA) for the NPS must include a consideration of reasonable alternatives to the preferred plan. Following consultation on the draft EN-7, the government will update the relevant AoS and HRA[25].

Question 2: EN-6 includes government assessed potential sites. In this consultation we propose EN-7 empowers developers to assess and identify potential sites using robust criteria. What is your view on the government proposal to shift its nuclear siting policy to a criteria-based approach?

Please indicate the extent to which you agree or disagree with the question and provide any further comments.

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly Agree
- Not enough information
- Please explain your answer (free text, 300 words)

Removal of deployment time limits on nuclear deployment

3.2.15 The sites listed in EN-6 were assessed according to their capability to deploy GW-scale nuclear power stations by 2025. This planning horizon was used to focus on the sites most likely to deploy the soonest. It was also used to enable a realistic and manageable list of sites for developers to focus on. This included consideration of

[25] The AoS for EN-6 (2010) is available at: https://www.gov.uk/government/publications/appraisal-of-sustainability-of-the-revised-draft-nuclear-national-policy-statement. The new NPS will be a "plan" for the purposes of the Habitats Regulations Assessment (HRA). The HRA of EN-6 is available at: https://www.gov.uk/government/publications/habitats-regulations-assessment-of-the-revised-draft-nuclear-national-policy-statement. Further detail on the environmental assessments is at Chapter 2, paragraph 2.7.

the availability of construction materials and skills, as well as expected timescales for investment decisions and appropriate licensing.

3.2.16 We continue to recognise the importance of new energy projects coming forward as soon as possible. The revised EN-1 sets out an enhanced needs case, which emphasises the importance of new energy projects to meet increased demand, support affordable decarbonisation and ensure that the UK has a reliable and secure energy system. Nuclear energy plays a critical role in this, providing a consistent and low-carbon energy source.

3.2.17 However, the government's nuclear ambitions require ongoing flexibility in site selection and a longer-term deployment horizon that opens up more siting opportunities. The fast pace of nuclear technology development and long lead-time for deploying nuclear projects could be constrained by the inclusion of a deployment deadline in EN-7. **It is therefore proposed that EN-7 does not impose any time limits on the deployment of new nuclear power stations**.

3.2.18 The removal of the time horizon for project deployment and increased flexibility in identifying sites for development would bring EN-7 in line with the other energy NPSs.

Question 3: EN-6 includes a time limit on deployment of new nuclear power stations. In this consultation we propose EN-7 is not time restricted to support long-term planning. What is your view on the government proposal to shift its nuclear siting policy to an unrestricted timeframe approach?

Please indicate the extent to which you agree or disagree with the question and provide any further comments.

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly Agree
- Not enough information
- Please explain your answer (free text, 300 words)

Question 4: The NPS aims to deliver increased flexibility to diversify nuclear sites to help meet our Net Zero ambitions, while ensuring that siting of new nuclear power stations is appropriately constrained by appropriate criteria. To what extent do you agree that the key policy proposals outlined in this section (*extending the NPS to new technologies, adopting a criteria-based approach to siting new developments, and by removing the deployment time limit to open up more siting*) achieve these aims?

Please indicate the extent to which you agree or disagree with the question and provide any further comments.

- Strongly disagree
- Disagree

- Undecided
- Agree
- Strongly Agree
- Not enough information
- Please explain your answer (free text, 300 words)

Proposed changes to the Planning Act 2008 to support a new nuclear NPS

3.2.19 The Planning Act 2008 sets out the overarching national infrastructure planning framework, including the generating stations considered to be Nationally Significant Infrastructure Projects (NSIPs). Currently, the definition of 'generating station' only covers those power stations that produce electricity, either as the sole end product or alongside direct heat or synthetic fuels, including hydrogen. Nuclear reactors that only produce heat or synthetic fuels are not currently classified as NSIPs.

3.2.20 **The government intends to broaden the scope of the NSIP definition to include heat-only and synthetic fuel-only reactors, which requires legislation to amend the Planning Act 2008.** Subject to parliamentary time, the necessary legislative changes may be introduced before the planned designation of EN-7.

3.2.21 However, should any heat-only or synthetic fuel-only reactor projects be ready to enter the planning process before such technologies are included in the NSIP regime, there are national consenting routes available for developers (for example, the Secretary of State can 'call in' projects for examination by PINS under Section 77 of the Town and Country Planning Act 1990 and can accept applications as development consent orders under Section 35 of the Planning Act 2008). It is anticipated that EN-7 would be a material consideration in any subsequent planning examination and decision.

3.2.22 In addition, currently, only nuclear power stations with a generation capacity of over 50MW in England are considered to be NSIPs. Planning applications for projects below 50MW would, therefore, ordinarily be examined and consented through the local planning process. However, it is challenging to justify taking different planning and siting approaches to large and small-scale reactors when many of the technologies are similar and the overall power output of the generating stations could be broadly not dissimilar where small-scale reactors are deployed at scale.

3.2.23 Since 2019, the Welsh Ministers have had powers to grant consent to generating stations in Wales with an output of between 10MW and 350MW. Applications for generating stations in Wales with an output above 350MW are examined by PINS and consented by the Secretary of State. The Welsh Government is currently consulting on policy proposals to establish a unified infrastructure consenting process for 'significant infrastructure projects,' which includes nuclear power stations with an installed generating capacity of between 50MW and 350MW. Any changes introduced to the Planning Act 2008 will not affect the powers of the Welsh Ministers to grant consent to generating stations in Wales with a generating output of between 50MW and 350MW.

3.2.24 **Given the complexity of all nuclear projects and the potential for applications to deploy 'first-of-a-kind' technologies, the government proposes to include all applications for nuclear generating projects in England, including those which currently fall below the 50MW threshold, within the national infrastructure planning regime**. This would also require legislation to amend the Planning Act 2008. In due course, the necessary legislative amendments will be made to the Planning Act 2008, subject to the outcome of this consultation and the usual parliamentary scrutiny process. Before such changes take effect, it is anticipated that EN-7 would be a material consideration in the examination of applications for these projects through the local planning system.

Question 5: Do you agree that legislation should be brought forward to include all nuclear fission projects within the NSIP regime in England, including reactors with a generating output of less than 50MW and reactors that only produce heat or synthetic fuels such as hydrogen?

Please indicate the extent to which you agree or disagree with the question and provide any further comments.

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly Agree
- Not enough information
- Please explain your answer (free text, 300 words)

Question 6: Do you have any evidence or technical information regarding fission reactors which only produce heat or synthetic fuels that may be useful to help inform whether they should be included in the nuclear NPS beyond 2025? (Free text, 300 words)

4 Nuclear siting criteria

4.1 Introduction

4.1.1 The following section discusses the proposed site assessment criteria that will be used by developers to assess the suitability of their proposed project sites.

4.1.2 Robust siting criteria are essential to ensure that nuclear power stations are located appropriately and are developed in a manner that aligns with the UK's energy, climate adaptation and environmental goals while minimising risks and maximising benefits.

4.1.3 The existing strategic siting criteria were used by the government to assess the potential suitability of sites that were nominated by industry in 2009. The government used this assessment to identify eight sites as potentially suitable for deployment of nuclear power stations by the end of 2025, which were listed in EN-6.

4.1.4 Whilst we are proposing some shifts to our policy approach in the new NPS (EN-7), we have reviewed the existing criteria and propose to retain them to determine the potential suitability of sites to host new nuclear power stations beyond 2025. The government has reviewed the strategic siting criteria and has not identified a need to introduce any additional siting criteria to enable the safe deployment of nuclear power stations. However, as they will no longer be used for a strategic siting assessment, we will refer to the criteria in EN-7 as 'site assessment criteria' instead.

4.1.5 We have considered whether it is necessary to take a different approach to the siting of Small Modular Reactors (SMRs) and Advanced Modular Reactors (AMRs). There are some differences between these technologies and traditional large-scale (GW) nuclear power stations, notably the reactor size and the potential for non-water-based cooling technologies. However, our assessment is that all these technology types will need to consider nuclear safety and security, environmental impacts and operational requirements when identifying whether their chosen site is suitable. Our position is therefore that the EN-6 strategic siting criteria remain relevant and applicable to GW, SMR and AMR nuclear technologies. We have not identified a need to introduce a separate set of criteria bespoke to advanced nuclear technologies, though we note that some criteria (such as Coastal Processes) may be less applicable to certain sites, which will need to be assessed on a project-by-project basis.

4.1.6 The precise nature of each individual site assessment will need to be proportionate to the size of the project and reactor type, including consideration of whether multiple reactors or different nuclear technologies are proposed on the same site.

4.1.7 The government also recognises that SMR and AMR technologies create new opportunities, including potential enhanced safety and different end-uses. For example, it may be beneficial to enable heat-generating nuclear reactors to be located nearer to the users of the heat produced. This may mean future reviews of

the NPS will require further updates to the siting criteria to better enable these opportunities once further evidence is available.

4.1.8 The remainder of section 4 will provide further detail on the proposed site assessment criteria.

4.2 Proposed Site Assessment Criteria

4.2.1 The following table lists the site assessment criteria we propose to include in EN-7, which would be used to assess the potential suitability of sites to deploy new nuclear power stations at the pre-application stage. These site assessment criteria are largely the same as the strategic siting criteria used in EN-6.

Table 1: List of Proposed Site Assessment Criteria

*As well as nuclear safety and security these criteria also include important elements of environmental protection.

Theme	Criteria	Discretionary or exclusionary
Nuclear Safety and Security	Flooding, tsunami and storm surge*	Discretionary
	Coastal processes*	Discretionary
	Proximity to major hazard sites and major accident hazard pipelines	Discretionary
	Proximity to civil aircraft movements	Discretionary
	Population density and locational characteristics	Exclusionary + discretionary
	Proximity to military activities	Exclusionary + discretionary
Environmental Protection	Internationally designated sites of ecological importance	Discretionary
	Nationally designated sites of ecological importance	Discretionary
	Areas of amenity and landscape value	Discretionary
	Cultural heritage	Discretionary
Operational requirements	Size of site to accommodate operation	Discretionary
	Access to suitable sources of cooling	Discretionary

4.2.2 As can be seen in the table above, only two of the criteria – population density and locational characteristics and proximity to military activities – are exclusionary and discretionary. Sites that do not meet the exclusionary elements of these criteria will, therefore, be considered unsuitable for the deployment of nuclear power stations.

The remaining criteria are solely discretionary. Sites may still be considered suitable for nuclear deployment even where they fail to fully meet individual discretionary criteria, although not fully addressing multiple discretionary criteria may cumulatively lead to a site being considered unsuitable.

4.2.3 The EN-7 site assessment criteria will form one part of the Development Consent Order (DCO) process. Developers will also continue to need to take account of other assessment criteria during the DCO application stage that will continue to be relevant when EN-7 is designated. These are:

- the overall criteria set out in the overarching energy NPS (EN-1), which set out the overall framework for all nationally significant energy infrastructure; and
- the nuclear-specific impacts and policy considerations currently set out in EN-6 (to be superseded by EN-7)

4.2.4 Further information on these other elements and the planning application process is set out in Annexes 1 and 2.

4.3 Detailed Consideration of Specific Site Assessment Criteria

4.3.1 The specific details of the EN-7 site assessment criteria that developers will need to address in their DCO applications will be developed following this consultation. These will be included in the draft EN-7, which will be published for consultation in due course. This section explores a number of policy developments for specific criteria that the government has identified. These policy developments largely result from the shift to a new criteria-based approach in EN-7.

4.3.2 The following sub-sections identify:

- those siting assessment criteria that are impacted on as a result of changes to the siting policy approach;
- those matters considered for, but discounted from, inclusion as new siting assessment criteria; and
- those siting assessment criteria without significant developments.

Site Assessment Criteria that are impacted on as a result of our key policy proposals

Flooding, tsunami and storm surge and coastal processes

4.3.3 Flood risk is a key consideration in any major infrastructure project, and is included as part of the Flooding, Tsunami and Storm Surge criterion in EN-6. It is also important to note that flood risk is not only covered by EN-6, but developers also have to ensure their proposal meets the flood risk requirements covered in other planning framework documents. Our assessment is that the detailed flood risk considerations covered in EN-1 remain relevant and appropriate and provide a useful framework for the assessment of nuclear developments under the proposed EN-7. There is also further guidance on flood risk included within the planning practice guidance set out by the Department for Levelling Up, Housing and Communities (DLUHC), which developers are encouraged to consult.

4.3.4 The government has considered whether flood risk should be an exclusionary criterion, ruling out the highest risk zones due to climate change, but we have concluded that this is not necessary as the flood risk assessments are comprehensive and include climate change modelling.

4.3.5 As part of the strategic siting assessment conducted by the government for EN-6, the Sequential and Exception Tests, which form part of the flood risk assessment, were undertaken for the eight sites listed as potentially suitable. However, under the new criteria-based approach, these tests will now need to be considered by developers. Given that the flood risk assessments form a crucial part of the permitting and licensing process, early engagement with these assessments will reduce risk for developers and reduce burdens on the regulators.

4.3.6 We therefore propose that the most appropriate time for these tests to be undertaken would be at the pre-application stage where the Planning Inspectorate and regulatory agencies will be holding early-stage discussions on projects before they enter the more detailed Development Consent Order (DCO) considerations. This approach is in line with other technologies, and we would encourage developers to refer to EN-1 and the DLUHC planning practice guidance on how a flood risk assessment and the relevant tests should be undertaken. We will consider the nuclear needs case and the approach for consideration of any reasonably available sites for the flood risk assessment as part of the draft EN-7. As discussed in this consultation, EN-7 will also account for nuclear energy being considered a critical national priority in the revised EN-1. This will also be taken into account when setting the requirements for developers to consider alternative approaches as part of their flood risk assessment.

4.3.7 The eight sites identified in EN-6 were located in coastal positions as these enabled easier access to large quantities of water for cooling gigawatt-scale reactors. Therefore, the focus of flood risk was on coastal flood risk. However, EN-7 seeks to include new nuclear technologies, which may have different cooling needs and water requirements, and this could enable new in-land locations. Therefore, it is proposed that flood risk considerations should include all potential sources of flood risk as relevant to the site.

4.3.8 Flooding is grouped with tsunami and storm surge to make a combined discretionary criterion. We are not proposing any changes to the assessment of either tsunami and storm surge, or to the separate Coastal Processes discretionary criterion, as these all require developers to take into account the latest climate change and flood risk modelling. The consideration of tsunami and storm surge risk and coastal processes (including erosion) remains relevant for sites located in coastal and estuaine locations. We do, however, recognise that these elements may be less applicable for projects proposed at in-land sites.

Locational characteristics and population densities

4.3.9 EN-6 emphasises the significance of safeguarding human health and well-being in the context of nuclear projects. Any potential impacts on these factors associated with nuclear facilities must be thoroughly assessed and managed by developers. The policy stresses the need for comprehensive health evaluations and mitigation strategies to ensure the safety and protection of individuals living and working near nuclear installations.

4.3.10 It is proposed that the site assessment criteria in EN-7 continue to include consideration against the current ‘semi-urban’ demographic criterion. This should be an exclusionary criterion to help screen out unsuitable locations at an early stage (there should be no single 30° sector around the site in which the population density exceeds 5000 persons per square kilometre). It should be noted that this initial consideration does not guarantee that the demographic features of a site will be considered acceptable by the Office for Nuclear Regulation (ONR) following its regulatory assessment when considering a nuclear site licence application.

4.3.11 The purpose of assessing the population surrounding proposed sites is to minimise the risk to the public in the unlikely event of an accident involving the spread of radioactive materials beyond the site boundary.

4.3.12 This assessment is in addition to the robust regulatory controls imposed by ONR at all stages of the life cycle of a nuclear site. A nuclear power station will only be allowed to operate with appropriate emergency plans in place.

4.3.13 It is recognised that there may be potential longer-term benefits for certain advanced nuclear technologies to be deployed closer to denser populations, such as to provide high-temperature heat to industrial plants. It is also noted that some advanced nuclear reactors are likely to contain smaller amounts of nuclear material than current gigawatt-scale reactors and there may be novel ways of protecting that material from accidental release. However, such technologies are currently being tested through demonstrator projects. It is therefore considered prudent to retain the semi-urban demographic criterion without amendment at present. The current criterion will continue to enable deployment of nuclear power stations at a range of potential sites and locations. Once there is operational experience and further underpinning evidence around these advanced nuclear technologies, there may be a case for modifying the criterion.

Question 7: Do you agree that we have correctly identified the criteria that are impacted by our proposed key policy changes?

Please indicate the extent to which you agree or disagree with the question and provide any further comments.

- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree
- Not enough information
- Please explain your answer (free text, 300 words)

Questions 7a-7d. If you wish to, please provide any comments to further expand on or explain your responses to the question in this section in relation to the following: (free text, 300 words)

7a - Flooding, tsunami and storm surge and coastal processes

7b - The default position for consideration of flood risk is that developers should first consider alternative sites or solutions at the national level unless there is a policy reason why the scope should be narrowed to focus on the regional or local level instead. Where flood or coastal erosion risk is identified, and an alternative site is not viable, options and mitigations will be considered in more detail through the flood risk assessment. We intend to consider whether there is policy justification to narrow the focus to a more regional or local level as part of the NPS, but would welcome any suggestions or evidence that would support our consideration and help us to define their scope.

7c - Locational characteristics and population densities

7d - Other criteria that are impacted upon that have not been identified above

Matters considered for, but discounted from, inclusion as new Site Assessment Criteria

Climate change resilience and adaptation

4.3.14 EN-6 repeatedly highlights the importance of nuclear power as a low-carbon energy source to address climate change and contribute to the UK's carbon reduction targets. EN-6 does not have a specific climate change criterion. Instead, climate change considerations are embedded within other siting criteria, which ensures that developers consider the potential impacts of climate change, such as increased flood risk or the need for alternative cooling systems, as well as potential mitigations and adaptations to address these impacts. Further climate change considerations for developers to take into consideration are also covered within the EN-1 criteria.

4.3.15 We continue to recognise that climate change mitigation is essential to minimise the most dangerous impacts of climate change, and we expect applicants to continue to provide information as to how any future nuclear development incorporates adaptation measures that take account of the effects of climate change under the EN-7 site assessment criteria.

4.3.16 Given that climate change is therefore covered within the existing site assessment criteria, as well as in EN-1, our assessment is that a specific climate change criterion would duplicate already existing robust processes for assessing climate impact on a site. We therefore do not think it necessary to introduce a separate criterion for climate change.

4.3.17 While we propose that the process for reviewing climate change impact and mitigations will remain the same as set out in EN-6, due consideration will need to be given to updated risks and projections. Likewise, it is expected that Generic Design Assessment and the relevant nuclear regulators will continue to assess the evidence in relation to climate change impacts and provide their view on the adaptation measures proposed. To support planning decisions, the government produces a set of UK Climate Projections[26] and has developed a statutory National Adaptation Programme[27]. The government's Adaptation Reporting Power[28] will ensure that reporting authorities (a defined list of public bodies and statutory undertakers, including energy utilities) assess the risks to their organisation presented by climate change.

Groundwater protection

4.3.18 Groundwater protection was not included as a specific strategic criterion when EN-6 was originally designated in 2011. This was because none of the eight sites listed in EN-6 were located over a source protection zone and EN-1 provides overall guidance on the approach to water quality, including groundwater protection. However, the 2017 consultation on EN-6 discussed adding a new criterion for Areas of Groundwater Protection. This set the expectation that any developers proposing a project that would impact a source protection zone should demonstrate in their DCO application how impacts could be avoided or mitigated.

4.3.19 The government recognises the importance of protecting groundwater sources, and we would continue to prefer that developers do not develop major infrastructure projects over groundwater zones where possible. However, this is not an issue specific to nuclear power. All large-scale infrastructure projects have the potential to harm groundwater source protection zones. This is why protection of groundwater sources forms a core part of other areas of the permitting and licensing processes. As well as the guidance provided in EN-1, the Environment Agency provides comprehensive guidance[29] on requirements, permissions, risk assessments and

[26] Met Office. UK Climate Projections (UKCP). Available at: https://www.metoffice.gov.uk/research/approach/collaboration/ukcp
[27] UK Government (2023). Government sets out adaptation programme to tackle climate impact. Available at: https://www.gov.uk/government/news/government-sets-out-adaptation-programme-to-tackle-climate-impact
[28] UK Government (2010). Adaptation Reporting Power, Frequently Asked Questions and Answers. Available at: https://assets.publishing.service.gov.uk/media/5a7a1d81ed915d6eaf153dd2/report-faq-110126.pdf
[29] UK Government (2017-2023). Groundwater protection. Available at: https://www.gov.uk/government/collections/groundwater-protection

controls for protecting groundwater sources, which developers must refer to during the permitting process. We therefore do not think it is necessary to make areas of groundwater protection a specific criterion within EN-7, as this criterion would duplicate already existing protections and create additional unnecessary work for developers and regulators.

4.3.20 However, while we are not proposing to make groundwater protection a criterion for the purposes of planning, developers should note that proposed projects that could impact a source protection zone likely will face greater challenges during the permitting process. Avoidance of groundwater protection zones, as well as early consultation of available guidance on groundwater protection and engagement with the environment agencies, will be encouraged in EN-7.

We do not propose for EN-7 to include specific or separate criteria on climate change and adaptation and on groundwater protection, as these are embedded within other areas of EN-7, EN-1 and within wider guidance. We would welcome feedback regarding development of this approach within EN-7.

Question 8: Do you agree that we have correctly identified that these criteria are embedded in EN-7, EN-1 and within wider guidance?

Please indicate the extent to which you agree or disagree with the question and provide any further comments.

- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree
- Not enough information
- Please explain your answer (free text, 300 words)

Questions 8a-8c. If you wish to, please provide any comments to further expand on or explain your responses to the question in this section in relation to the following: (free text, 300 words)

8a - Climate change resilience and adaptation

8b – Groundwater protection

8c - Other criteria that should be considered for discounting that have not been identified above

Site Assessment Criteria without significant development

Proximity to military activities

4.3.21 In EN-6, sites were assessed against the possibility of military activity presenting an external hazard to the safety of nuclear power stations, considering low fly zones and training areas, or if the nuclear site would adversely impact the ability of the

military to carry out essential tasks, such as training and other operations. The criterion was both exclusionary and discretionary depending on the nature of the military site and activity and options for mitigation. Our assessment is that this criterion will continue to apply to all types of nuclear power stations, and we do not intend to amend this criterion in EN-7.

Proximity to major hazard sites and major accident hazard pipelines

4.3.22 Under the proposed process, the developer will assess the location of the development in relation to a major accident site including major hazard pipelines and will receive advice from the Health and Safety Executive and the environment agencies regarding the potential to mitigate any arising impacts. These potential challenges are well-addressed within the existing nuclear regulatory process, and they do not represent a gap or issue in the siting process. We therefore do not intend to amend this criterion in EN-7.

Proximity to Civil Aircraft Movements

4.3.23 EN-6 assessed the sites in relation to whether any likely nuclear power station development within the nominated site boundary could be protected from risks against civil aircraft movement and that the effects on air traffic control could potentially be mitigated. These assessments will no longer be done by the government but will still be required to be completed by any potential developer, as well as all relevant considerations outlined in Section 5.4 of EN-1 as part of the application for development consent process. This is a discretionary criterion and as there are no significant changes to this process or considerations, we do not intend to amend this criterion in EN-7.

Nationally and Internationally designated sites of ecological importance

4.3.24 There are two criteria covering sites of ecological importance designated and protected at the national, European, and international levels. These sites, as well as any impacts to them or mitigations, continue to be relevant for consideration by developers. We therefore do not intend to amend either of these criteria in EN-7.

Areas of amenity and landscape value and Cultural heritage

4.3.25 We have considered whether the criterion for Areas of amenity and landscape value should be split into two separate criteria covering the different levels of landscape protection, namely nationally designated landscapes (National Parks, The Broads, and Areas of Outstanding Natural Beauty) and other areas of high landscape and amenity value such as locally valued landscapes. We note that the current criterion does include protection for both of these categories and do not think it necessary to amend the current criterion.

4.3.26 Similarly, the cultural heritage criterion includes protection for areas of cultural importance and remains relevant and important for developers to consider when proposing a project. We therefore intend to maintain this criterion in its current form as well.

4.3.27 We would encourage developers to engage early with the relevant environmental, historical, and cultural agencies should their development potentially impact a protected landscape or area of cultural heritage.

Size of site to accommodate operation

4.3.28 Selecting a site with a sufficient land area to accommodate construction, operation and decommissioning will remain an important criterion. To reduce the likelihood of further land being needed and to increase the usability of sites, developers will be encouraged to ensure that they consider all likely site plans and reasonable variations to those plans when identifying potential sites. These considerations should include land required that is additional to the proposed site boundary, for example for the construction of car parks, access roads and marine landing facilities, as well as for the construction and decommissioning of the nuclear power station.

4.3.29 The government expects the key operational elements of the power station, particularly the infrastructure that has the potential to directly cause a radiological hazard such as the reactor building (including the associated turbine hall), spent fuel and intermediate level waste stores, to be located within the boundary of the proposed site. However, the government recognises that flexibility is required to accommodate detailed local level considerations.

4.3.30 Any funded decommissioning plans would need to be based on the site identified so it is important to consider decommissioning considerations as part of site selection.

Access to suitable sources of cooling

4.3.31 Reliable sources of cooling water for gigawatt-scale nuclear power stations are necessary to convey heat from the reactor core in normal and fault conditions. The lower demands on cooling for individual SMR and AMR units may enable inland siting of some SMRs and AMRs, with abstraction from and discharges to inland water sources such as rivers and lakes, although deployment of multiple units at a single location will increase cooling demands. Developers should also note that the use of inland water bodies requires permissioning by the relevant environment agency and local authority, considering the resource use implications and impact on other users. Regulatory scrutiny of liquid effluent discharges and heat requirements for river water may also be more stringent than for coastal water.

4.3.32 Alternative cooling technologies, such as cooling towers, are available that reduce demand on water resources and potentially avoid the need for access to large rivers, lakes or sea water. However, the use of some types of cooling tower can have negative visual impacts that would be considered in the planning process. Air-cooling may also be credible for some AMR technologies.

4.3.33 The current assessment criteria for siting (set out in EN-6) are integral to the selection of suitable sites for nuclear power stations in the UK. They aim to ensure that potential/chosen sites meet the high safety and environmental standards, address public concerns, and contribute to the UK's energy and environmental objectives. The proposals in this consultation aim to support increasing the deployment of nuclear power stations, in line with the above.

Question 9: Do you agree that we have correctly identified that these criteria do not require any significant development?

Please indicate the extent to which you agree or disagree with the question and provide any further comments.

- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree
- Not enough information
- Please explain your answer (free text, 300 words)

Questions 9a-9h, If you wish to, please provide any comments to further expand on or explain your responses to the question in this section in relation to the following: (free text, 300 words)

9a - Proximity to military activities

9b - Proximity to major hazard sites and major accident hazard pipelines

9c - Proximity to Civil Aircraft Movements

9d - Nationally and internationally designated sites of ecological importance

9e - Areas of amenity and landscape value and Cultural heritage

9f - Size of site to accommodate operation

9g - Access to suitable sources of cooling

9h - Other criteria that are without significant development but have not been identified above

4.4 Other matters considered in EN-6

4.4.1 In addition to the site assessment criteria, there are a number of other factors discussed in EN-6 that we have considered as part of the criteria-based approach to EN-7. This sub-section explores these in further detail.

Merits of a nominated site in comparison to other alternative solutions

4.4.2 The UK's policy emphasises that applicants should thoroughly consider the strategic merits of a nominated site in comparison to other alternative solutions, which may include alternative sites. The strategic siting assessment for the current NPS considered this for the eight listed sites by comparing these sites against three potential alternative sites.

4.4.3 As the government no longer proposes to undertake a site nominations process and national strategic siting assessment, in future developers will need to work with the

Planning Inspectorate (PINS) to consider alternative solutions and/or sites at the project level in the same way as for other infrastructure projects.

4.4.4 The government will be required to consider reasonable alternatives to the policy set out in EN-7 in the Appraisal of Sustainability (AoS) and Habitat Regulations Assessment (HRA). In line with the proposed criteria-based approach to new nuclear development, these reasonable alternatives for the AoS and HRA will be considered at a strategic level, rather than by comparing designated sites with alternative sites. The proposed reasonable alternatives for the AoS and HRA will be set out in the draft EN-7, which will be published for public consultation in due course, together with the needs case for new nuclear energy infrastructure.

4.4.5 Recognising the crucial role of low carbon energy generating infrastructure for our energy security and net zero ambitions, the revised EN-1 also concludes that new nationally significant low carbon infrastructure is a critical national priority. In practice, this means an enhanced presumption in favour of granting consent to low carbon Nationally Significant Infrastructure Projects (NSIPs) in the decision-making process, and specific non-HRA residual impacts which are not able to be addressed by the mitigation hierarchy are unlikely to result in an application being refused. Further guidance on how this will be applied to low carbon energy NSIPs is available in the revised EN-1. As a low carbon energy source, it is expected that nuclear will be considered a critical national priority. This will be taken into account in the draft EN-7, including in our consideration of alternatives.

4.4.6 As discussed in the previous section on flood risk, the consideration of alternatives within the flood risk assessment will also be discussed further in EN-7. Flood risk assessments, including the sequential and exception tests, will still need to be undertaken by developers even where a project is a critical national priority.

Radioactive waste management

4.4.7 The issue of nuclear waste generated by new nuclear power stations remains an important consideration within the siting policy for new nuclear developments. It emphasises the government's commitment to implementing a safe and sustainable approach to the management of radioactive waste. It is proposed that EN-7 should enable AMR and SMR deployment. Whilst these new technologies may give rise to new or different waste streams, the underlying requirement remains that developers are required to demonstrate that they have considered and accounted for the long-term management of nuclear waste and spent fuel, including conditioning, packaging, storage, transportation, and disposal methods.

4.4.8 EN-6 recognises the government's policy that higher activity waste and spent fuel (for which no further use is envisaged) should be disposed of in a Geological Disposal Facility (GDF). It states that new nuclear power stations should make provision for the eventual disposal of their radioactive waste and spent fuel in a GDF. Developers are required to engage with the government's GDF programme and ensure that their waste management plans align with the future availability of a GDF. We intend for EN-7 to take the same approach to nuclear waste management as in EN-6.

4.4.9 Since EN-6 was designated, the following are the key developments in nuclear waste management:

- A new process to identify a suitable location for a GDF was launched in England in 2018 and in Wales in 2019. Both are consent-based processes that require the developer, Nuclear Waste Services, to work in partnership with communities that enter the process.
- Four communities entered the process and some early geological investigations have taken place, which has resulted in one community not being taken further in the process.
- Three communities continue in the process.
- The UK Government has legislated in the Energy Act 2023 for a more proportionate regulatory framework at the end stages of decommissioning when hazards and risks are low.
- The UK Government and devolved administrations published a consultation in March 2023 to update policies on managing radioactive substances and nuclear decommissioning. This includes proposals to allow the disposal of intermediate level waste in near surface disposal facilities. The UK Government and devolved administrations expect to publish the final policy early in 2024.

Impacts of multiple reactors

4.4.10 EN-6 recognises the possibility of more than one reactor being deployed at a site, and most of the current gigawatt-scale plants host two reactors. However, newer nuclear reactors potentially have smaller individual electricity generation and site footprints, which could enable a greater number of small reactors to be deployed at a single site, the siting of different nuclear technology types at the same site, or multiple reactors being deployed on the same site at different times.

4.4.11 EN-6 underscores that developers planning to deploy multiple reactors on a single site should assess and mitigate the cumulative impacts of such developments. The policy emphasises the need for comprehensive evaluations that consider the combined effects of multiple reactors on various factors such as environment, infrastructure, and local communities. The advent of new technologies has not changed the underlying policy objective, which is to ensure that the impacts of these developments are carefully managed and minimised through effective planning and mitigation strategies. Therefore, it is proposed for EN-7, as per EN-6, that if an application were to be submitted for multiple reactors at a site, the potential impacts of all the proposed reactors would need to be taken into consideration by PINS, other regulatory bodies and ultimately the Secretary of State for Energy Security and Net Zero. Developers planning to deploy multiple reactors are therefore strongly encouraged at an early stage to consider the maximum number of reactors that may be deployed on a particular site to minimise the risk of future material changes to their DCOs.

Ownership of sites

4.4.12 Prospective DCO applicants are not required to own the land that they have selected for the development of new nuclear power stations as land ownership is a commercial concern that is subject to change. However, applicants are expected to submit to PINS up-to-date information about the ownership and land use of the site and, where relevant, details of consultation with landowners. Where the land is subject to an alternative use at the time of the application, PINS should consider that use in conjunction with the relevant section on land use in EN-1.

Biodiversity Net Gain

4.4.13 Since EN-6 was designated, new legislation and guidance on biodiversity net gain in nationally significant infrastructure planning has been issued which is relevant for developers to consider for any projects that come forward through EN-7.

4.4.14 Biodiversity net gain is a policy that aims to ensure that any development project contributes to the enhancement of biodiversity. It means that a development needs to ensure that the ecological value of the site is improved, rather than simply avoiding or mitigating harm to biodiversity.

4.4.15 The key considerations a local planning authority and a nuclear power station land manager or developer may need to address include conducting a biodiversity assessment, calculating the biodiversity net gain, implementing biodiversity offset and compensation measures, collaboration with environmental authorities, long-term monitoring, and maintenance of biodiversity enhancement measures, providing an Environmental Impact Assessment, and community engagement. Specific requirements may vary depending on the location and size of a nuclear power station.

4.4.16 Applicants should consider the guidance set out in EN-1 Section 4.5 at an early stage when developing projects.

Question 10: Do you agree with the approach we have proposed in regard to the other matters that were considered in EN-6 and will need considering in EN-7? Please indicate your levels of agreement with the position set out in the Consultation.

Please indicate the extent to which you agree or disagree with the question and provide any further comments.

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly Agree
- Not enough information
- Please explain your answer (free text, 300 words)

Questions 10a-10f. If you wish to, please provide any comments to further expand on or explain your responses to the question in this section in relation to the following: (free text, 300 words)

10a: Merits of a nominated site in comparison to other alternative solutions: Do you have any suggestions or evidence for what should or should not be included as part of the government's consideration of reasonable alternatives at the strategic level?

10b: Radioactive waste management

10c: Impacts of multiple reactors

10d: Ownership of sites

10e: Biodiversity Net Gain

10f: Other matters that should be considered further as part of the criteria-based approach

5 Implementation of key policy proposals

5.1 Key considerations

5.1.1 It is important to understand that the proposed policy approach will only affect the pre-application stage of the planning process and will not make any changes to the planning regime or have any effect on the current safety, security, and environmental protection offered by the regulatory regimes.

5.1.2 The key difference between the current nuclear National Policy Statement (NPS) EN-6 and the criteria-based approach under EN-7 is a shift from government to the developer in undertaking the site assessment. Under EN-7 the developer will be responsible for site characterisation and ensuring any potential site meets the criteria set out in the NPS for the deployment of their chosen technology.

5.1.3 The criteria-based approach will not alter the statutory requirements for consultation, ensuring the current opportunities for stakeholders, interested parties and the public to have their say on any future site proposals remains the same.

5.2 Proposed change in approach

5.2.1 This section illustrates the participation in the implementation of the criteria by the Planning Inspectorate (PINS), regulators, developers, and other stakeholders. There are some changes to the roles in the pre-application stage of the planning process, which are outlined below. Further detail will be developed, taking on board feedback from this consultation, alongside feedback for the draft NPS consultation.

5.2.2 Under EN-6 the government carried out strategic siting assessments designed to identify sites in England and Wales potentially suitable for the deployment of new nuclear power stations by the end of 2025. This followed a process where sites were nominated for consideration or identified by the Alternative Sites Study, leading to the designation of the current eight sites. Under the proposals put forwards for EN-7, the government would no longer undertake strategic siting assessments. However, it is proposed that the site assessment criteria remain as a basis through which to assess potential sites for nuclear electricity generation (and potentially heat in the future).

5.2.3 To enable a thriving modern nuclear power generation programme, we are proposing to empower developers[20] to put forward sites in a market-led approach to take advantage of new nuclear technologies. Employing a criteria-based approach will involve developers taking on the role of selecting sites, but the crucial role of the regulators and planning authorities remains in providing advice concerning the potential suitability of sites for nuclear energy generation against the siting criteria. The role of community and stakeholder engagement also remains a fundamental

part of the planning processes. The government believes that the sites designated in EN-6 retain inherent positive attributes that will make them suitable for consideration for further development.

5.3 Practical changes to implementation of the site assessment process under the new NPS

5.3.1 It is proposed that the site assessment criteria remain as a basis to assess potential sites for nuclear electricity generation (and potentially heat in the future). Developers should utilise the exclusionary criteria to screen and identify sites that are suitable for their specific project proposals. It is intended that tools and data will be made available to support developers to conduct this assessment themselves. The Ministry of Defence will lead on the exclusionary criteria concerning defence sites, and the Office of Nuclear Regulation will provide advice to PINS concerning the application of the exclusionary criteria by the developer at each appropriate stage via PINS processes. Where a potential site is not excluded by the exclusionary criteria, the developer may continue the site characterisation to determine whether a site meets the discretionary criteria. This marks a change from the EN-6 process whereby government assessed nominated sites against these criteria. The developer may then consider if it would be appropriate to apply to PINS for a Development Consent Order (DCO). It is important to note that the developer has a legal requirement to notify PINS of their intention to apply for a DCO.

5.3.2 The developer will be responsible for leading the coordination of the site characterisation work, to assemble a body of evidence to evaluate the site against the discretionary criteria, engaging with regulators as appropriate. Early engagement with regulators and planning authorities is recommended to assist with applications for environmental permits and planning consent which may require site assessments. The coordination with regulators proposed under EN-7 represents a minor amendment in the process from EN-6 given the activities and coordination the developer is currently expected to undertake. As is currently the case under the current EN-6 process, alongside coordinating with regulators, the developer will attend an inception meeting with PINS to discuss project timeframes before engaging with the local authority and landowner. Engagement between the developer, regulators, local authorities, and other interested parties should take place to evaluate site characterisation work against the discretionary criteria. This marks no change in the guidance set out in EN-6.

5.3.3 Developers will have to justify against the criteria set in EN-7 as to why their selected site is suitable for the deployment of nuclear reactors whilst maintaining high standards of safety, security, and environmental protection.

5.3.4 The consultation processes should continue as they currently operate under EN-6. Early engagement with all interested stakeholders, including the local community, is strongly advised to allow sufficient time for feedback to be incorporated into the proposals. Throughout the pre-application process, PINS will be able to provide services to assist the developer, including the providing of feedback on draft documents and providing a scoping opinion. The developer will also be required to

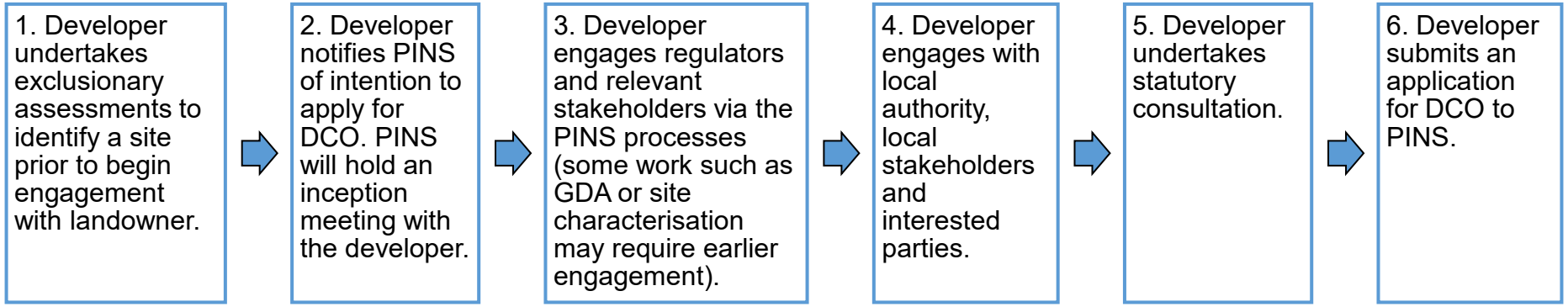
undertake statutory consultation with the relevant local authorities. Undertaking consultations is a continuation of the existing process.

5.3.5 After the pre-application work has been completed, the developer will submit a DCO application to PINS for acceptance. At this stage, PINS will consider whether or not the application meets the standards to proceed to public examination. Further advice on the DCO process is set out on the PINS website.[30] This approach will be further strengthened by the reforms proposed in the Nationally Significant Infrastructure Project (NSIP) reform action plan, which seek to improve engagement between developers and all interested parties during the pre-application stage.

5.3.6 Alongside the DCO application process, the developer would need to undergo other regulatory regimes, including but not limited to applying for a Nuclear Site Licence, obtaining relevant Environmental Permits, ensuring the technology has secured Regulatory Justification alongside undertaking the recommended Generic Design Assessment (GDA) where appropriate which developers and regulators would normally have expected to be completed or be well progressed by the time of a DCO application. The Secretary of State would also need to approve a funded decommissioning programme for the site. For further information on the other regulatory regimes please see Annex 3.

[30] The Planning Inspectorate (2012). The process. Available at:https://infrastructure.planninginspectorate.gov.uk/application-process/the-process/.

Figure 1: The flow chart illustrates the site selection and pre-application process in the proposed policy with respect to the role of the developer.



This high-level diagram illustrates the pre-application process. It is important to note that activities of each stage overlap and the stages act as logical review points for the developer to consider the progress of the project. Additional information concerning each process is found within the main body of text. Engagement with statutory consultees is strongly advised for greater detail. PINS will provide advice to the developer throughout the pre-application process which includes providing feedback on draft documents and a scoping opinion.

Question 11: The 'Implementation' section describes how the new policy approach will be implemented. What are your views on the proposed model for implementation?

Please indicate the extent to which you agree or disagree with the question and provide any further comments.

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree
- Not enough Information
- Please explain your answer (free text, 300 words)

Question 12: What, if any, help from government or GBN[1] would you expect to see to support developers with site identification? (free text, 300 words)

6 Summary of all consultation questions

Question 1: EN-6 applies only to GW scale projects. In this consultation we propose EN-7 applies to GW scale projects, and in addition SMRs and AMRs. What is your view on the government proposal to expand the range of technologies covered by the new nuclear NPS?

Please indicate the extent to which you agree or disagree with the question and provide any further comments.

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly Agree
- Not enough information
- Please explain your answer (free text, 300 words)

Question 2: EN-6 includes government assessed potential sites. In this consultation we propose EN-7 empowers developers to assess and identify potential sites using robust criteria. What is your view on the government proposal to shift its nuclear siting policy to a criteria-based approach.

Please indicate the extent to which you agree or disagree with the question and provide any further comments.

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly Agree
- Not enough information
- Please explain your answer (free text, 300 words)

Question 3: EN-6 includes a time limit on deployment of new nuclear power stations. In this consultation we propose EN-7 is not time restricted to support long-term planning. What is your view on the government proposal to shift its nuclear siting policy to an unrestricted timeframe approach?

Please indicate the extent to which you agree or disagree with the question and provide any further comments.

- Strongly disagree
- Disagree
- Undecided
- Agree

- Strongly Agree
- Not enough information
- Please explain your answer (free text, 300 words)

Question 4: The NPS aims to deliver increased flexibility to diversify nuclear sites to help meet our Net Zero ambitions, while ensuring that siting of new nuclear power stations is appropriately constrained by appropriate criteria. To what extent do you agree that the key policy proposals outlined in this section (*extending the NPS to new technologies, adopting a criteria-based approach to siting new developments, and by removing the deployment time limit to open up more siting*) achieve these aims?

Please indicate the extent to which you agree or disagree with the question and provide any further comments.

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly Agree
- Not enough information
- Please explain your answer (free text, 300 words)

Question 5: Do you agree that legislation should be brought forward to include all nuclear fission projects within the NSIP regime in England, including reactors with a generating output of less than 50MW and reactors that only produce heat or synthetic fuels such as hydrogen?

Please indicate the extent to which you agree or disagree with the question and provide any further comments.

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly Agree
- Not enough information
- Please explain your answer (free text, 300 words)

Question 6: Do you have any evidence or technical information regarding fission reactors which only produce heat or synthetic fuels that may be useful to help inform whether they should be included in the nuclear NPS beyond 2025? (Free text, 300 words)

Question 7: Do you agree that we have correctly identified the criteria that are impacted by our proposed key policy changes?

Please indicate the extent to which you agree or disagree with the question and provide any further comments.

- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree
- Not enough information
- Please explain your answer (free text, 300 words)

Questions 7a-7d. If you wish to, please provide any comments to further expand on or explain your responses to the question in this section in relation to the following: (free text, 300 words)

7a - Flooding, tsunami and storm surge and coastal processes

7b - The default position for consideration of flood risk is that developers should first consider alternative sites or solutions at the national level unless there is a policy reason why the scope should be narrowed to focus on the regional or local level instead. Where flood or coastal erosion risk is identified, and an alternative site is not viable, options and mitigations will be considered in more detail through the flood risk assessment. We intend to consider whether there is policy justification to narrow the focus to a more regional or local level as part of the NPS, but would welcome any suggestions or evidence that would support our consideration and help us to define their scope.

7c - Locational characteristics and population densities

7d - Other criteria that are impacted upon that have not been identified above

Question 8: Do you agree that we have correctly identified that these criteria are embedded in EN-7, EN-1 and within wider guidance?

Please indicate the extent to which you agree or disagree with the question and provide any further comments.

- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree
- Not enough information
- Please explain your answer (free text, 300 words)

Questions 8a-8c. If you wish to, please provide any comments to further expand on or explain your responses to the question in this section in relation to the following: (free text, 300 words)

8a - Climate change resilience and adaptation

8b – Groundwater protection

8c - Other criteria that should be considered for discounting that have not been identified above

Question 9: Do you agree that we have correctly identified that these criteria do not require any significant development?

Please indicate the extent to which you agree or disagree with the question and provide any further comments.

- Strongly Disagree
- Disagree
- Undecided
- Agree
- Strongly Agree
- Not enough information
- Please explain your answer (free text, 300 words)

Questions 9a-9h, If you wish to, please provide any comments to further expand on or explain your responses to the question in this section in relation to the following: (free text, 300 words)

9a - Proximity to military activities

9b - Proximity to major hazard sites and major accident hazard pipelines

9c - Proximity to Civil Aircraft Movements

9d - Nationally and internationally designated sites of ecological importance

9e - Areas of amenity and landscape value and Cultural heritage

9f - Size of site to accommodate operation

9g - Access to suitable sources of cooling

9h - Other criteria that are without significant development but have not been identified above

Question 10: Do you agree with the approach we have proposed in regard to the other matters that were considered in EN-6 and will need considering in EN-7? Please indicate your levels of agreement with the position set out in the Consultation.

Please indicate the extent to which you agree or disagree with the question and provide any further comments.

- Strongly disagree
- Disagree
- Undecided

- Agree
- Strongly Agree
- Not enough information
- Please explain your answer (free text, 300 words)

Questions 10a-10f. If you wish to, please provide any comments to further expand on or explain your responses to the question in this section in relation to the following: (free text, 300 words)

10a - Merits of a nominated site in comparison to other alternative solutions: Do you have any suggestions or evidence for what should or should not be included as part of the government's consideration of reasonable alternatives at the strategic level?

10b - Radioactive waste management

10c - Impacts of multiple reactors

10d - Ownership of sites

10e - Biodiversity Net Gain

10f - Other matters that should be considered further as part of the criteria-based approach

Question 11: The 'Implementation' section describes how the new policy approach will be implemented. What are your views on the proposed model for implementation?

Please indicate the extent to which you agree or disagree with the question and provide any further comments.

- Strongly disagree
- Disagree
- Undecided
- Agree
- Strongly agree
- Not enough Information
- Please explain your answer (free text, 300 words)

Question 12: What, if any, help from government or GBN[1] would you expect to see to support developers with site identification? (free text, 300 words)

Question 13: Is there any additional information, perspective, or consideration that you believe is important to the development of the nuclear NPS, which may not have been adequately addressed or is missing from the consultation document? Please share your insights and suggestions. (Free text, 300 words)

Question 14: Please identify the sectors or interests you represent in relation to the siting of new nuclear power stations. (Select all that apply):

- Member of the general public
- Local community member in the vicinity of potential or existing nuclear installation
- Organisation responsible for/interested in new nuclear development.
- New nuclear development supply chain organisation
- Environmental advocate
- Energy business or industry, professional or expert
- Regulator
- Nuclear energy professional or expert
- Academic or researcher
- Local authority/government representative
- National government representative
- Non Government Organisation
- Other (free text, 30 words)

7 Next steps

This consultation is the first step in the process towards designating a new nuclear National Policy Statement (NPS). It is targeted to those material changes in policy approach to siting new nuclear reactors, with a further formal consultation to be conducted on the draft NPS. A high-level timeline of expected activity over the next two years is noted below.

Stage 1 (spring 2024)	- Intended publication of a government response to this consultation on the policy approach to siting -Development of a draft NPS, including detailed criteria and processes to support site selection - An Appraisal of Sustainability (AoS) and Habitats Regulation Assessment (HRA) will be undertaken to accompany the draft NPS.
Stage 2 (estimated autumn 2024)	- Government expects to consult on a draft Nuclear NPS. - Government expects to consult on the draft AoS and HRA.
Stage 3 (estimated spring 2025)	- Intended publication of a government response to the consultation on the draft NPS - Development of the final nuclear NPS - The AoS and HRA will be updated as necessary in line with the new NPS.
Stage 4 (estimated autumn 2025)	- Government expects to publish the final nuclear NPS, AoS and HRA. - Government intends to lay the final nuclear NPS in parliament, as per sections 5(4) and 9 of the Planning Act 2008.

Annex 1: What are energy National Policy Statements?

What are energy National Policy Statements (NPSs)?

The energy NPSs set out national energy policy and form the framework for decision-making on applications for development consent for energy Nationally Significant Infrastructure Projects (NSIPs) under the Planning Act 2008. EN-1 sets out the needs case for certain energy infrastructure and general assessment principles, whilst the other five energy NPSs (EN-2 to EN-6) set out technology-specific assessment principles. Applications for development consent for energy NSIPs must be in accordance with the relevant NPSs.

Relevance to decision-makers

The NPSs provide the framework within which decision-makers can make legally robust and timely decisions. EN-1 sets out how NPSs guide the Secretary of State's decision-making and the matters which the Secretary of State is required by the Planning Act 2008 to take into account in considering applications.

Relevance to applicants

The NPSs provide the legal, policy and technical information which applicants should consider and assess within their applications. The national strategic criteria are the nuclear specific assessment criteria that will be used, in addition to the EN-1 general principles and EN-6 nuclear specific criteria to identify potentially suitable sites for new nuclear power stations.

Review of existing energy NPSs

The energy NPSs were first 'designated' in 2011[31]. In December 2020[32] the government announced a review of the energy NPSs under section 6 of the Planning Act 2008 to ensure they reflect the policies set out in the Energy White Paper and that we continue to have a planning policy framework which can support the infrastructure required for the transition to net zero.

[31] UK Government (2011). National Policy Statements for energy infrastructure. Available at: www.gov.uk/government/publications/national-policy-statements-for-energy-infrastructure.

[32] UK Government (2020). Energy white paper: Powering our net zero future. Available at:www.gov.uk/government/publications/energy-white-paper-powering-our-net-zero-future.

The review has been conducted in line with guidance on the NPS review process originally published by the Ministry of Housing Communities and Local Government (now DLUHC)[33]. Each NPS was considered in turn, with the aim of identifying unaligned or out-of-date references to the regulatory or policy framework. Where a change was identified, the likely impact of making amendments was considered. In parallel, consideration was given to whether significant changes in circumstance necessitated broader changes to the NPS. Consideration was then given to whether the NPS should be withdrawn, amended or remain as it is, in line with the requirements of Section 6(5) of the Planning Act 2008.

The review determined that the existing EN-1 to EN-5 documents should be amended. The consultation sought views on the revised EN-1 to EN-5 documents.

EN-6 currently sets out the planning and consents regime for nuclear projects deployable by the end of 2025. A review of EN-6 has concluded that EN-6 would not be amended as there are no changes material to the limited circumstances in which it will have effect (see the Written Ministerial Statement of 7 December 2017)[34].

EN-6 will continue to have the role set out in the 2017 Written Ministerial Statement during the development of any new nuclear NPS. It will continue to have effect for any nuclear electricity generation infrastructure deployable before 2025, or for applications to amend development consent for such generation. It also provides information, assessments and statements which may continue to be important and relevant for projects which will deploy after 2025. This may include those projects which enter examination before designation of any amendments to EN-1 as well as those that enter examination after designation of any amendments to EN-1.

Overview of EN-1

The umbrella energy NPS (EN-1), first published in July 2011 and with an updated draft version published in 2023, makes clear the government's view that nuclear power generation is a low-carbon, proven technology which will play an important role as we move to diversify and decarbonise our sources of electricity and increase the resilience of the UK's energy system. Both versions also carried out a detailed analysis of the future need for electricity generation and that assessment made clear that new nuclear power has an important role to play in the UK's future energy mix.

EN-1 is part of a suite of NPSs issued by the Secretary of State of the Department for Energy Security and Net Zero (DESNZ). It sets out the government's policy for delivery of major energy infrastructure.

EN-1 sits above all the remaining energy NPSs. It has three main roles:

- to set out how the suite of energy NPSs will work and to explain the framework of existing government policy;

[33] UK Government (2021). Planning Act 2008: Guidance on the process for carrying out a review of existing National Policy Statements. Available at: www.gov.uk/guidance/planning-act-2008-guidance-on-the-process-for-carrying-out-a-review-of-existing-national-policy-statements.
[34] UK Parliament (2017). Statement on Energy Infrastructure. Available at:https://questions-statements.parliament.uk/written-statements/detail/2017-12-07/HCWS321.

- to set out assessment principles and generic impacts applicable to all energy infrastructure; and
- to establish the need for new energy infrastructure
- The current need for new energy infrastructure is established in EN-1, both in general terms by looking at the need for energy supply and a diverse mix of electricity generation, and in terms of the need for specific, low-carbon types of energy infrastructure. EN-1 also contains generic information on certain issues which apply across more than one type of infrastructure, such as assessment principles and impacts.

Annex 2: Hierarchy of nuclear siting criteria

EN-1 generic assessment principles and impacts and EN-6 nuclear specific 'national strategic criteria'

Assessment principles

Assessment principles describe the general considerations that should be applied in the assessment of DCO applications for new nuclear power stations, including relevant policy considerations.

- EN-1 sets out the general policies that apply to all energy infrastructure applications.
- EN-6 sets out the specific policies that apply to applications for nuclear energy infrastructure.

Strategic siting criteria

The strategic siting criteria are designed to inform an assessment of the *potential* suitability of sites for new nuclear development at the pre-application stage and are grouped under the following three broad categories: nuclear safety and security, environmental protection, and operational requirements. Being judged to be a potentially suitable site does not guarantee that development consent will be granted to a particular project, nor does it override site licensing and permitting requirements.

Impacts and general siting considerations

These are assessment criteria that address the impacts arising from infrastructure projects and which developers should address in their DCO applications.

- EN-1 generic impacts – these are designed to address the impacts arising from the development of all energy infrastructure projects *or* which arise in similar ways from the development of energy infrastructure covered in at least two of the energy NPSs. They are assessed together with technology-specific impacts during DCO examination.

EN-6 nuclear impacts - assessment criteria that address the specific impacts arising from all nuclear projects.

Annex 3: Summary of Regulatory Regimes

Development Consent Orders (DCOs) –The DCO is a front-loaded process led by the applicant where the development proposal must be fully scoped and refined before submission. It would be advisable to approach PINS early in the process and set up an inception meeting to scope out the project. This includes statutory requirements and guidance on consultation and community engagement at various points in the process.[35]

Environmental Permits – The Environment Agencies are responsible for receiving applications for the environmental permits that are required for planning, constructing and operating a new nuclear power plant.[21] Relevant activities that require an environmental permit include:

- discharges and disposals of radioactive waste
- operation of combustion plant providing construction and standby generation or for steam raising
- abstraction of water
- waste operations, including incineration
- discharge of turbine condenser cooling, process, ground and surface waters
- work on or near main rivers, flood or sea defences.

The Environment Agencies will decide if a permit should be issued and, if so, the conditions it should contain to ensure that people and the environment will be properly protected. It is an offense not to comply with the conditions of an environmental permit or to carry out a specified activity without an environmental permit. Permit conditions include requirements for duty holders to have sufficient competent resources and management arrangements for limiting discharges and disposals and, where relevant, for the use of Best Available Techniques (BAT) to minimise creation and disposals of wastes and its impact on people and the environment. Environmental permits can be required at the earliest stage of a project to enable site investigations and characterisation. It is advisable to apply for Environmental Permits prior to applying for a DCO to help provide permitting information into DCO decision making and to help ensure that permits are in place to enable commencement of works.

The Environment Agencies welcome early engagement with prospective operators and developers of new nuclear power plants so as to ensure that there is good understanding of the regulators' requirements and expectations in environmental permitting and in planning (DCO) decision making, where they are statutory consultees. Details about and access to the regulators' site specific pre-application advice services on permitting and planning

[35] The Planning Inspectorate (2012). The process. Available at:https://infrastructure.planninginspectorate.gov.uk/application-process/the-process/.

matters is available by contacting them or via their websites. This site specific pre-application advice is in addition to the regulators' work on generic design assessment.

Nuclear Site Licensing - Before a nuclear power station can be built and operated on a specific site, a nuclear site license must be obtained from the Office for Nuclear Regulation. The following conditions must be met before the license may be granted:

- the site is safe/secure;
- the site is suitable for the specific design; and
- the proposed operator is capable of controlling construction, operation and maintenance of the plant.

A site license puts the license holder under strict legal obligations and gives the Office for Nuclear Regulation (ONR) specific regulatory powers to ensure the site licensee is delivering its responsibilities to maintain safety and security. In most cases, a new build project will require a Development Consent Order (DCO), issued by the Planning Inspectorate. It is therefore advisable to apply for a nuclear site licence alongside a DCO. A licence may be granted when ONR is satisfied that the licence applicant's safety and security documentation provides assurance that the site will be suitable for the proposed activities.

Regulatory Justification - This is a high-level, non-site-specific assessment which assesses whether the individual or societal benefit resulting from a class or type of practice outweighs the health detriment it may cause.' In October 2020, the Secretary of State for Environment, Food and Rural Affairs took on the role of Justifying Authority for new nuclear reactors because of a legislative requirement for functional separation. Pre-application advice will be provided by the Justification Application Centre, an administrative office in the Department for Energy Security and Net Zero, which provides an initial point of contact for applicants. The Justifying Authority for nuclear plants must be 'functionally separate' from the Department for Energy Security and Net Zero, so whilst the Department for Environment, Food and Rural Affairs (DEFRA) may seek advice on process, the Department for Energy Security and Net Zero must not be involved in the decision-making process. Justification can be obtained prior to the other regulatory processes.[36]

Generic Design Assessment (GDA) – GDA is a recommended voluntary de-risking process where nuclear regulators work together to ensure any new nuclear power stations built in England & Wales meet high standards of safety, security, environmental protection and waste management.[37]

[36] UK Government (2010). Regulatory Justification decisions on nuclear reactors. Available at: https://www.gov.uk/government/publications/regulatory-justification-decisions-on-nuclear-reactors.

[37] Office for Nuclear Regulation (2023). Guidance on assessment of new nuclear power stations. Available at: https://www.onr.org.uk/new-reactors/guidance-assessment.htm.

Funded Decommissioning Programme (FDP) - The Secretary of State is required to approve of plans for adequate financing arrangements to meet the full costs of decommissioning and their full share of waste management and disposal costs.[38]

[38] UK Government (2011). THE ENERGY ACT 2008 Funded Decommissioning Programme Guidance for New Nuclear Power Stations. Available at: https://assets.publishing.service.gov.uk/media/5a790679e5274a2acd18ba0a/guidance-funded-decommissioning-programme-consult.pdf.

This consultation is available from: www.gov.uk/government/consultations/approach-to-siting-new-nuclear-power-stations-beyond-2025

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