UK Government

Draft National Policy Statement for Fusion Energy Generation EN-8

June 2026

Department for Energy Security and Net Zero

Draft National Policy Statement for Fusion Energy Generation EN-8

Presented to Parliament pursuant to section 9(2) of the Planning Act 2008

June 2026

This publication is available at www.gov.uk/official-documents.

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

ISBN 978-1-5286-6601-5

E03626413 06/26

Printed on paper containing 40% recycled fibre content minimum.

Printed in the UK by HH Associates Ltd. on behalf of the Controller of His Majesty's Stationery Office

Contents

1 Introduction

1.1 Background

1.1.1 The demand for electricity is expected to increase significantly over the coming years, with the potential for demand to more than double by 2050, even with significant improvements in energy efficiency.[1] New low-carbon energy generating capacity is essential to affordably meet this demand, while improving the UK's energy security and working towards net zero emissions. This urgency is recognised in the overarching energy National Policy Statement, EN-1, which identifies low carbon energy infrastructure as a 'Critical National Priority'.[2]

1.1.2 Fusion energy has the potential to be a transformative source of clean and abundant energy to meet this increased demand in the UK and throughout the world. The most common fuels used in fusion energy reactions are effectively inexhaustible, with deuterium readily extracted from seawater, and tritium, while naturally rare, can be bred from the neutrons produced in the fusion reaction. The government has concluded, for the reasons set out in EN-1, that there is a Critical National Priority for the provision of nationally significant low carbon energy infrastructure. For the reasons set out above, fusion energy infrastructure meets the definition of "low carbon infrastructure" as set out in 'The critical national priority for low carbon infrastructure' section of EN-1.

1.1.3 The UK's 2025 Clean Energy Industries Sector Plan, which highlighted fusion as a priority sub-sector, sets out how fusion provides significant opportunities for well-paid UK jobs, technology transfer into adjacent sectors, and export opportunities into a global market estimated to be worth up to £12 trillion in the future.[3]

1.1.4 The 2026 UK Fusion Strategy goes further to set out the government's objective to accelerate growth of the UK fusion industry to capture the economic and strategic benefits of fusion.[4] This builds on the government's record investment of over £2.5 billion in fusion research and development, supporting the UK's growing fusion industry and reaffirming Britain's leading position in the global race for fusion energy.[5]

[1] National Energy System Operator (2025) 'Future Energy Scenarios: Pathways to Net Zero', page 127
[2] Department for Energy Security and Net Zero (2026) 'Overarching National Policy Statement for energy (EN-1), 2025'
[3] Department for Business and Trade & Department for Energy Security and Net Zero (2025) 'Industrial Strategy: Clean Energy Industries Sector Plan'
[4] Department for Energy Security and Net Zero (2026) 'A new energy revolution: The UK's plan for delivering fusion energy'
[5] UK Industrial Fusion Solutions, UK Atomic Energy Authority & Department for Energy Security and Net Zero (2025) 'Major funding milestone for world-first prototype fusion plant'

1.1.5 Crucial in this endeavour is developing the Spherical Tokamak for Energy Production (STEP) prototype fusion power plant. Backed by £1.3 billion of government funding, UK Fusion Energy (UKFE) will deliver STEP to catalyse the UK fusion supply chain, develop new technical solutions for fusion energy generation and create the systems integration capability needed to deliver fusion energy facilities.[6]

1.1.6 This National Policy Statement is a key enabler of delivering the UK's fusion objective, providing certainty to investors, developers and others in the fusion industry as to how the government will handle planning for the fusion infrastructure that will create economic growth and strengthen energy security.

1.1.7 This National Policy Statement, taken with the Overarching National Policy Statement for Energy (EN-1), provides the primary policy for decisions by the Secretary of State for Energy Security and Net Zero (henceforth, 'the Secretary of State') on applications for development consent they receive relating to fusion energy infrastructure, as defined in section 1.6 of this National Policy Statement.

1.1.8 The way in which National Policy Statements on energy infrastructure guide Secretary of State decision making, and the matters which the Secretary of State is required by the Planning Act 2008 (as amended) ("the Act") to take into account in considering applications, are set out in the 'Introduction; Background' and 'Assessment Principles; General Policies and Considerations' sections of EN-1.

1.1.9 As set out in 'The need for new nationally significant infrastructure projects' section of EN-1, the government is committed to ensuring the UK's energy supply is secure, reliable, affordable and consistent with the ambition to have net zero carbon emissions in 2050. Having a range of domestic low-carbon energy sources is crucial for delivering these objectives. EN-1 sets out the need for new nuclear energy infrastructure, including fusion power plants. In meeting this need, it is for applicants to bring forward proposals that balance generation capacity, cost and ensuring their projects are safe, deliverable and apply the 'mitigation hierarchy' to any adverse impacts.

1.1.10 The applicant must ensure that their application is consistent with the instructions given to applicants in this National Policy Statement, EN-1 and any other National Policy Statements that are relevant to the application in question.

[6] Department for Energy Security and Net Zero (2026) 'Funding breakdown for fusion energy' and UK Industrial Fusion Solutions, UK Atomic Energy Authority & Department for Energy Security and Net Zero (2025) 'Major funding milestone for world-first prototype fusion plant'

1.1.11 This National Policy Statement may also be helpful to local planning authorities in preparing their local impact reports and to all interested parties who are involved in a particular application, given the important status in planning law of the National Policy Statement.

1.2 Role of this National Policy Statement in the wider planning system

1.2.1 The 'Role of this National Policy Statement in the wider planning system' and 'Scope of the Overarching National Policy Statement for Energy' sections of EN-1 provide details on the role of EN-1, and the technology specific National Policy Statements, in the wider planning system. This National Policy Statement, EN-8, is a technology specific National Policy statement which applies to fusion energy infrastructure.

1.3 Relationship with EN-1

1.3.1 This National Policy Statement is part of a suite of energy infrastructure National Policy Statements. It should be read in conjunction with EN-1 and other relevant National Policy Statements, such as EN-5 which concerns electricity networks infrastructure.[7]

1.3.2 Applicants are not required to have regard to the National Policy Statement for nuclear (fission) energy generation (EN-7) when preparing applications under this National Policy Statement. The scope of EN-7 is entirely separate to EN-8, as described in paragraph1.6.6.

1.3.3 This National Policy Statement does not seek to repeat the material set out in EN-1, which applies to all applications covered by this National Policy Statement unless stated otherwise.

1.4 Geographical coverage

1.4.1 This National Policy Statement, together with EN-1, is the primary decision-making policy document for the Secretary of State on fusion energy infrastructure, as defined in section 1.6 of this National Policy Statement, in England and Wales.

1.4.2 In Wales, the Secretary of State has no functions in relation to planning applications that do not relate to nationally significant infrastructure.

[7] Department for Energy Security and Net Zero (2026) 'National Policy Statements for energy infrastructure'

1.4.3 In Scotland and Northern Ireland, the Secretary of State has no functions in relation to planning applications. However, energy policy is generally a matter reserved to UK Ministers and this National Policy Statement may therefore be a relevant consideration in planning decisions across the UK.

1.5 Period of validity and review

1.5.1 This National Policy Statement will remain in force in its entirety unless withdrawn or suspended in whole or in part by the Secretary of State. It is possible that references to material outside this National Policy Statement may be rendered obsolete by updates or revisions. Should this occur, applicants should seek up to date information from the relevant body.

1.5.2 Other than in exceptional circumstances, National Policy Statements must be subject to a full review and updated at least every five years.

1.6 Infrastructure covered by this National Policy Statement

1.6.1 This National Policy Statement has effect in relation to 'fusion energy infrastructure' which this National Policy Statement defines as infrastructure using the process of fusion to generate energy, and any ancillary infrastructure, that is:

A. defined as a nationally significant infrastructure project by the Act, or

B. treated as development for which development consent is required according to sections 35 and 35ZA of the Act.

1.6.2 At present to be a nationally significant infrastructure project fusion energy infrastructure must be expected to have capacity greater than 50 megawatts (MW) in England and 350MW in Wales. However, the government is committed to amending the Act to ensure that fusion energy infrastructure in England with a thermal capacity, or a combination of thermal and electrical capacity, of over 50MW is also included.[8] This National Policy Statement will apply to these additional types of development.

[8] Department for Energy Security and Net Zero (2025) 'Fusion energy facilities: new national policy statement and proposals on siting'

1.6.3 Fusion energy facilities in Wales with an electrical generating capacity between 50 and 350 MW are considered a Significant Infrastructure Project (SIP) under the Infrastructure (Wales) Act 2024 and SIP applications are considered by Welsh Ministers.[9] Sections 22 and 23 of the Infrastructure (Wales) Act 2004 also set out that developers may request that their project is considered as a SIP in certain circumstances even if they do not meet the definitions in that Act. This National Policy Statement does not apply to SIPs in Wales but could be considered by Welsh Ministers as a relevant material consideration.

1.6.4 The developer of a fusion energy facility in England that is not within the definition of a nationally significant infrastructure project in the Act may nevertheless request that their project is considered within the nationally significant infrastructure project development consent regime established by the Act, rather than within the local planning regime. If the developer makes a qualifying request, and the Secretary of State is satisfied that the facility is nationally significant, the Secretary of State may give a direction under section 35 of the Act that the proposal be treated as development for which development consent is required. Such a direction removes the requirement for a proposal to secure other forms of approval, including planning permission, which are listed in section 33(1) and (2) of the Act.

1.6.5 Fusion research facilities and small-scale demonstrator fusion infrastructure are considered important precursors to larger scale development, and are some of the types of projects the Secretary of State would expect to consider directing into the nationally significant infrastructure project development consent regime if such a request were made.

1.6.6 Infrastructure using nuclear fission to generate energy alongside use of a fusion device are not within the scope of this National Policy Statement. The relevant National Policy Statement for nuclear (fission) energy generation is EN-7.[10]

[9] Welsh Government, 'Infrastructure (Wales) Act 2024'
[10] Department for Energy Security and Net Zero (2025) 'National Policy Statement for nuclear energy generation (EN-7)'

1.7 The Appraisal of Sustainability and Habitats Regulations Assessment relating to this National Policy Statement

1.7.1 This National Policy Statement has been subject to an Appraisal of Sustainability as required by the Act and the Environmental Assessment of Plans and Programmes Regulations 2004. A Habitats Regulations Assessment has been prepared in accordance with the Conservation of Habitats and Species Regulations 2017 (as amended) and the Conservation of Offshore Marine Habitats and Species Regulations 2017.

1.7.2 These are published alongside this National Policy Statement and are available at: www.gov.uk/government/consultations/draft-national-policy-statement-for-fusion-energy-generation-en-8

2 Assessment principles

2.1 Introduction

2.1.1 EN-1 sets out the general principles that should be applied in the assessment of development consent applications across the range of energy technologies. The 'Generic Impacts' section of EN-1 sets out policy on the assessment of impacts which are common across a range of these technologies.

2.1.2 This National Policy Statement, EN-8, is concerned with matters which are relevant to applications for development consent to develop fusion energy infrastructure, irrespective of the specific fusion technology that is being used. Applicants should show how their application meets the requirements in EN-1 and this National Policy Statement, as well as any other legal and regulatory requirements. In addition, for any electricity network transmission infrastructure, applicants and the Secretary of State should consider relevant policy in EN-5.

2.1.3 This National Policy Statement requires applicants to demonstrate in their applications that they have appropriately addressed nineteen considerations that are particularly relevant to fusion energy infrastructure. The details of how they are to do this are given in sections 3.2 to 3.5 of this National Policy Statement. Some of these considerations are particularly relevant when considering suitable locations for the fusion energy infrastructure, while others become more relevant as the designs for fusion energy infrastructure for a chosen location are developed. For more details see paragraph 3.1.5.

2.1.4 Applicants should apply the 'mitigation hierarchy' as set out in EN-1, and the Secretary of State must apply the 'The critical national priority for low carbon infrastructure' section of EN-1.

2.2 Good Design

2.2.1 Fusion infrastructure is likely to be a significant workplace, wider economic driver and landscape feature for the host location and community. Energy generating infrastructure has in the past contributed to the character of places and been a source of pride and identity for residents. Consideration of Good Design principles at an early planning stage will help create this beneficial relationship with host communities while potentially reducing cost, complexity and/or disruption at a later stage of delivery.[11]

[11] Further information on design principles for national infrastructure can be found on the National Infrastructure and Service Transformation Authority website. Guidance on how Good Design may be delivered in applications can be found here: Planning Inspectorate (2024) 'Nationally Significant Infrastructure Projects: Advice on Good Design'

2.2.2 The 'Criteria for good design for Energy Infrastructure' section of EN-1 sets out planning expectations for all energy infrastructure on Good Design, and further information is provided in the 'Consideration of good design for energy infrastructure' section of EN-5.

2.2.3 Applicants should determine the appropriate design principles for their proposed infrastructure, based on consideration of Good Design principles, to help deliver relevant business, planning and regulatory requirements in an integrated way, providing wider benefits for neighbours, the business and the natural environment.

2.3 The Regulatory Justification Process and the nationally significant infrastructure project development consent regime

2.3.1 The Justification of Practices Involving Ionising Radiation Regulations 2004 require all new classes or types of practice resulting in exposure to ionising radiation to be "justified" (by their economic, social or other benefits in relation to the health detriment they may cause) in advance of being first adopted or first approved.

2.3.2 Following consultation in 2021, United Kingdom Atomic Energy Agency's ('UKAEA') STEP Programme was asked by the government in 2022 to prepare to submit a Regulatory Justification application for fusion energy facilities on behalf of the fusion community.[12] This was submitted on 15 December 2025 by UK Industrial Fusion Solutions ('UKIFS') before it was re-named: UK Fusion Energy ('UKFE').[13]

2.3.3 Given that Regulatory Justification is a separate regulatory process, a decision to grant development consent should not be delayed if a Regulatory Justification decision is subject to approval or legal challenge. However, if a Regulatory Justification decision is subject to approval or legal challenge, the Secretary of State should consider whether requirements should be attached to the Development Consent Order to ensure that the order is conditional on the existence of a valid Regulatory Justification decision.

[12] Department for Business, Energy and Industrial Strategy (2022) 'Towards fusion energy: proposals for a regulatory framework'
[13] See the list of applications here: Department for Energy Security and Net Zero (2013) 'Justification of Practices Involving Ionising Radiation application register'

2.4 Relationship between regulatory regimes for fusion energy infrastructure and the nationally significant infrastructure project development consent regime

2.4.1 The government will continue to pursue opportunities to improve coordination between government departments, the nationally significant infrastructure project development consent regime, and regulatory regimes for fusion infrastructure, to enhance the delivery of fusion infrastructure and drive development of low carbon, safe and abundant energy.

2.4.2 As with other major energy infrastructure, regulators play an important role in ensuring the safety, security and protection of people and the environment in relation to the design, construction, operation and decommissioning of fusion energy infrastructure.

2.4.3 Due to the hazard profile of fusion energy, and following public consultation, the government decided in June 2022 that fusion energy facilities should continue to be principally regulated by the Health and Safety Executive ("HSE") and the relevant environment agency (the Environment Agency in England, and Natural Resources Wales in Wales).[14]

2.4.4 'Fusion Regulators' for the purposes of this National Policy Statement therefore means the Health and Safety Executive and, depending on the location of the project, the Environment Agency or Natural Resources Wales.

2.4.5 Other regulators may also have a regulatory role in relation to fusion energy facilities. For example, the Marine Management Organisation for marine impacts, the Office for Nuclear Regulation for the transport of radioactive materials via road, rail or inland waterways, and the Department for Transport for the transport of other hazardous materials. In addition, if there is potential for cross-border effects, then regulators like the Scottish Environmental Protection Agency may also have a role.

2.4.6 For the proposed project to be viable and capable of delivering energy security and other benefits, applicants must be confident that they will be able to secure the necessary regulatory consents, permits and licences in addition to the development consent they are seeking. However, it is understood that it would not be fair to expect the applicant to be certain of all considerations of interest to relevant regulators at the point development consent is sought and/or granted.

[14] Department for Business, Energy and Industrial Strategy (2022) 'Towards fusion energy: proposals for a regulatory framework'

2.4.7 The applicant should seek to minimise the likelihood of any variance between the proposals for which development consent is sought, any conditions on development consent, and any requirements imposed as part of a relevant consent, permit or licence, by preparing for and progressing through the development consent and other relevant regulatory processes with a view to concluding them concurrently. Early and ongoing engagement with relevant regulators will help to maximise the likelihood of meeting the requirements of this National Policy Statement and progressing smoothly through subsequent regulatory stages.

2.4.8 The Examining Authority should not delay its advice to the Secretary of State until completion of any relevant consenting, permitting or licensing process, or recommend development consent is refused on the grounds that a relevant regulatory consent, permit or licence is outstanding,

2.4.9 The Secretary of State should not delay their decision on whether to grant development consent until completion of any relevant consenting, permitting or licensing process, or refuse development consent on the grounds that a relevant regulatory consent, permit or licence is outstanding, unless they have good reason to believe a relevant regulatory consent, permit or licence is unlikely to be granted. Good reason may include advice from the relevant regulators that the development proposal is so unreasonable, irrational and/or incomplete that the relevant regulators cannot see a reasonable way for the applicant to meet regulatory requirements within the bounds of the Development Consent Order being sought.

2.4.10 The Secretary of State and the Examining Authority should assume that regulatory regimes will operate effectively and consider residual impacts that remain once measures required by the relevant regulators and the ‘mitigation hierarchy’ have been applied.

2.4.11 This section and the following sections should be read in conjunction with the equivalent sections in EN-1.

2.5 Climate change adaptation and mitigation

2.5.1 This National Policy Statement seeks to help to achieve the government’s policy to mitigate climate change, and its mission to make Britain a Clean Energy Superpower.[15] It does this by providing confidence to industry and investors to bring forward fusion energy infrastructure projects. Fusion energy has the potential to be globally transformative, offering low carbon, safe, secure, abundant baseload power.

[15] UK Government (2024) ‘Plan for Change: Making Britain and Clean Energy Superpower’

2.5.2 By requiring applicants to bring forward proposals that will be resilient to the effects of climate change without increasing risks elsewhere, this National Policy Statement seeks to help achieve the UK's climate change adaptation policy.[16] As climate change is likely to increase risks to infrastructure, for example from flooding, applicants must set out how their proposed infrastructure would be resilient to:

A. increased risk of flooding, taking into account the long-term implications of flood risk
B. landform change and increased risk of storm surge and rising sea levels
C. higher temperatures
D. increased risk of drought, which could lead to a lack of available process water
E. risks from cascading failures across multiple sectors or infrastructure networks
F. any other risks and safety considerations likely to be impacted by climate change

2.5.3 The 'Climate Change Adaptation and Resilience' section of EN-1 sets out generic requirements to ensure that major energy infrastructure is resilient to climate change, and that necessary action can be taken during its construction, operation and decommissioning.

2.5.4 The 'Greenhouse Gas Emissions' section of EN-1 sets out the generic requirements for major energy infrastructure relating to greenhouse gas emissions during its construction, operation and decommissioning.

2.5.5 The 'Coastal Change' and 'Flood Risk' sections of EN-1 set out generic requirements for major energy infrastructure to manage coastal change and flood risks, including climate change impacts.

2.5.6 Climate change considerations can also be found in the 'Flooding', 'Landform change' and 'Seismic activity' parts of this National Policy Statement.

2.5.7 The resilience of the proposed infrastructure to climate change should also be assessed in any Environmental Statement accompanying an application. The 'Environmental Effects/Considerations' section of EN-1 provides further information on the requirement for applicants to provide an Environmental Statement. Future increased risk of flooding must be covered in any required Flood Risk Assessment using most recent guidance.[17]

[16] The most recent version of any such policy should be referred to. At the time of publication this is: Department for Environment, Food and Rural Affairs (2023) 'Third National Adaptation Programme (NAP3)'
[17] Environment Agency (2022) 'Flood risk assessments: climate change allowances'

2.6 Impact of multiple devices

2.6.1 At the heart of every fusion energy facility is the device where the fusion reactions occur. Applicants may wish to include more than one fusion device in their proposals for fusion energy infrastructure.

2.6.2 Applicants wishing to deploy fusion devices in multiple phases may apply for a single Development Consent Order which provides for development in phases (including the compulsory purchase of land for each phase) or seek a Development Consent Order for each separate phase of development as their intentions for the site evolve over time.

2.6.3 Applicants will not be penalised for not achieving the maximum scope of a Development Consent Order (for example, for delivering only an initial phase of a multiphase Development Consent Order) provided they still achieve the benefits of the phase or phases delivered (as set out in the application), without exceeding the associated negative impacts.

2.6.4 If an applicant wishes to secure a Development Consent Order providing for multiple phases of fusion energy infrastructure development, the applicant must ensure each phase in its own right – as well as the development as a whole – complies with the expectations set out in this National Policy Statement and other relevant National Policy Statements, along with any relevant regulatory requirements. This will involve articulating the benefits and impacts of each phase, and how any impacts will be mitigated.

2.6.5 The Secretary of State must be satisfied that each phase of any proposal for phased infrastructure development meets the criteria set out in paragraph 2.6.4 of this National Policy Statement, and that the Development Consent Order contains appropriate mechanisms to ensure the phases are brought forward as proposed in the application.

3 Assessment considerations

3.1 Introduction

3.1.1 This section lists the considerations that are particularly relevant for fusion energy infrastructure, explaining what (if any) additional requirements to those in EN-1 need to be met. These considerations are grouped into four themes: Environmental, Safety & Security, Operational and Developmental.

3.1.2 The Assessment Principles and Generic Impacts listed in EN-1 which are not referred to in this National Policy Statement also apply to fusion energy infrastructure applications.

3.1.3 For all principles and considerations in this National Policy Statement, and all principles and impacts in EN-1, the applicant must address the whole lifecycle of the fusion infrastructure, i.e. its construction, operation and decommissioning, including any storage of radioactive materials onsite. Applicants should be clear about the intended timing and timescales of each different part of the lifecycle of their proposed fusion energy infrastructure and assess impacts accordingly.

3.1.4 EN-1 sets out how applicants and the Secretary of State should consider and compare alternative solutions, including alternative sites. Particularly relevant are the 'The critical national priority for low carbon infrastructure' and 'Environmental Effects/Considerations' sections of EN-1.

3.1.5 Applicants should note that the considerations detailed in this National Policy Statement with the most relevance for siting decisions are: 'Flooding', 'Landform change', 'Biodiversity and geological conservation', 'Areas of amenity, historic environment and landscape', 'Water quality and the marine environment', 'Brownfield land', 'Seismic activity', 'Proximity to military activities', 'Proximity to major hazard sites and pipelines', 'Proximity to civil aircraft and spacecraft movements', 'Size of site', 'Access to cooling', 'Grid connection' and 'Socioeconomic'.

3.1.6 In July 2025, the UK government confirmed that no local population density restriction would apply to fusion energy infrastructure based on the low hazard of fusion energy facilities.[18] The Secretary of State must therefore not refuse an application for development consent on the grounds that the proposed development is located within, or is in proximity to, an area of high population density.

[18] Department for Energy Security and Net Zero (2025) 'Consultation on a New National Policy Statement: The UK government's response to the consultation on the proposed approach to siting fusion energy facilities'

3.1.7 Whilst all proposals for fusion energy infrastructure are welcomed, applicants should demonstrate consideration of sustainable land use when making siting decisions. This includes seeking opportunities to use (or partially use) brownfield sites, opportunities to co-locate with other industries, and opportunities for good access to workforce and public transport. Further details are provided in the 'Brownfield land', 'Socioeconomic', and 'Local Impacts' considerations of this National Policy Statement.

3.1.8 As per the ‘General Policies and Considerations; Early engagement’ section of EN-1, early engagement is strongly encouraged between the applicant and key stakeholders. A non-exhaustive list of bodies, that applicants are advised to engage with for each consideration, is given in the Annex to this National Policy Statement. Some of these bodies only have a role in relation to infrastructure or impacts in either England or Wales, and so are not always relevant. Where there is potential for cross-border effects within the UK, the applicant should also engage similar bodies in Scotland or Northern Ireland.

3.1.9 A full list of statutory consultees for nationally significant infrastructure projects (NSIPs) can be found in Schedule 1 to The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009.[19] Guidance on engaging with public bodies with specific roles in the NSIP process is also available.[20] Finally, applicants are encouraged to make use of the Planning Inspectorate’s pre-application service.[21]

3.1.10 Engagement with the relevant Fusion Regulators will include discussions on what consents, permits and licences the proposed infrastructure is likely to need – see section 2.5 of this National Policy Statement for further details on the relationship between the planning and regulatory regimes.

[19] UK Government, ‘The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009’ Schedule 1. SI 2009/2264
[20] Planning Inspectorate (2025) ‘Nationally Significant Infrastructure Project – Advice on working with public bodies in the infrastructure planning process’
[21] Planning Inspectorate (2024) ‘Nationally Significant Infrastructure Projects: 2024 Pre-application Prospectus’

3.2 Environmental

Flooding

3.2.1 The 'Flood Risk' section of EN-1 sets out the generic flood risk requirements for major energy infrastructure.

3.2.2 Flooding and coastal erosion can pose significant risks to communities, infrastructure and property, and its impacts can be severe. Fusion energy infrastructure can both be impacted by floods and can impact flooding risks in areas surrounding the infrastructure. Applicants are therefore advised to determine the 'Flood risk vulnerability classification' for all parts of the proposed fusion energy infrastructure across its whole lifecycle and understand how flooding risks should be addressed.[22]

3.2.3 If applying the Sequential Test, applicants for fusion energy infrastructure should follow the guidance available in the 'Flood Risk' section of EN-1 as well as national planning guidance, and should consider constructability, operability and other issues when assessing reasonable alternative sites in relation to flood risk.[23] These could include, but are not limited to: proximity or connectivity to transmission infrastructure and/or the end user for the energy produced, site access for large items required for construction or operation, any need for the infrastructure to be located in a specific region or locality and other considerations as set out in this section of this National Policy Statement. This list is not exhaustive and there may be other issues that determine whether another site on land at a lower risk of flooding is not a reasonable alternative.

3.2.4 The applicant and the Secretary of State must apply the 'Flood Risk' section of EN-1 with any Sequential Test having been carried out as set out above.

Landform change

3.2.5 The 'Coastal Change' section of EN-1 sets out the generic issues of major onshore energy infrastructure proposed on the coast and the assessments that must be undertaken.

3.2.6 Fusion energy infrastructure may be sited in non-coastal locations, and could then impact the natural functioning of estuarine, riverine and lacustrine locations, with consequential impacts on erosion and other landform change.

[22] Detailed information on 'Flood Risk Vulnerability Classification' can be found in Annex 3 of the Ministry of Housing, Communities and Local Government, 'National Planning Policy Framework' (updated December 2024)

[23] Detailed information on applying the Sequential Test can be found in Ministry of Housing, Communities and Local Government, 'Flood risk and coastal change' (updated September 2025)

3.2.7 Where fusion energy infrastructure may impact an estuary, lake, river or reservoir, the applicant should include an assessment of the effects on these areas following the approach in the 'Coastal Change' section of EN-1 and propose appropriate mitigation measures.

3.2.8 The applicant and the Secretary of State must apply the 'Coastal Change' section of EN-1 in relation to erosion and other landform change at coastal locations. The applicant and the Secretary of State must also apply the policy set out in the 'Coastal Change' section of EN-1 to estuarine, riverine and lacustrine locations, in accordance with this National Policy Statement.

Biodiversity and geological conservation

3.2.9 The 'Environmental and Biodiversity Net Gain', 'Biodiversity and Geological Conservation' and 'The critical national priority for low carbon infrastructure' sections of EN-1 set out the relevant generic requirements for major energy infrastructure.

3.2.10 Given the potential scale of fusion energy infrastructure, and as part of applying the 'mitigation hierarchy', applicants should consider variations to building layout to avoid ecologically sensitive areas. In addition, applicants should demonstrate how the risk of introducing and spreading invasive or non-native species (INNS) will be avoided or minimised.

3.2.11 The applicant and the Secretary of State must apply the 'Environmental and Biodiversity Net Gain', 'Biodiversity and Geological Conservation' and 'The critical national priority for low carbon infrastructure' sections of EN-1, with appropriate consideration given to variations to building layout and the risk of introducing and spreading INNS.

Areas of amenity, historic environment and landscape value

3.2.12 The 'Dust, Odour, Artificial Light, Smoke, Steam, and Insect Infestation', 'Historic Environment' and 'Landscape and Visual' sections of EN-1 set out the relevant generic requirements of major energy infrastructure.

3.2.13 For any electricity networks infrastructure, EN-5 (National Policy Statement for Electricity Networks Infrastructure) will also be relevant.

3.2.14 Fusion energy infrastructure is expected to include large buildings which are likely to cause visual intrusion. In addition, given the likely timescales of the infrastructure there may be long-term effects on visual amenity and heritage significance, which it may not be possible to completely eliminate through mitigation.

3.2.15 The applicant and the Secretary of State must apply the 'Dust, Odour, Artificial Light, Smoke, Steam, and Insect Infestation', 'Historic Environment' and 'Landscape and Visual' sections of EN-1 and, if relevant, EN-5 recognising that it may not be possible for all effects on visual amenity and heritage significance to be completely eliminated through mitigation.

Water quality and the marine environment

3.2.16 The 'Water Quality and Resources' and 'Marine Considerations' sections of EN-1 set out the relevant generic requirements for major energy infrastructure.

3.2.17 Fusion energy infrastructure, like other major infrastructure, could impact water quality and the marine environment through de-watering from construction activities.

3.2.18 All fusion energy infrastructure is expected to require cooling during its operation but the detailed specifications for cooling systems are likely to vary. If the proposed fusion energy infrastructure uses a wet cooling system, this could impact water quality and the marine environment during operation, particularly if the water is sourced from groundwater.

3.2.19 The applicant should set out the characteristics of any cooling system proposed, and the specific implications of the proposal on marine, estuarine, riverine, groundwater, lake and/or reservoir environments.

3.2.20 If a wet cooling system is proposed, mitigation measures must be used in the design of such systems to minimise adverse impacts, such as through careful locating of water abstraction and discharge points (where applicable). The application should include specific measures to minimise impacts to fish and aquatic biota by impingement and/or entrainment or by excessive heat or biocidal chemicals from discharges to receiving waters.

3.2.21 The applicant and the Secretary of State must apply the 'Water Quality and Resources' and 'Marine Considerations' sections of EN-1. The Secretary of State must also be satisfied that the characteristics and proposed mitigation measures of any cooling system are appropriate.

3.2.22 Furthermore where cooling water abstraction infrastructure is proposed to be located in an area where an abstraction permission is not required from the relevant regulators, the imposition of any requirements to mitigate any impact of that abstraction infrastructure, and the acceptance or not of any residual impacts, are a matter for the Secretary of State to determine when considering whether to grant Development Consent and what conditions to apply to that consent.

Brownfield land

3.2.23 The 'Land Use, Including Open Space, Green Infrastructure, and Green Belt' section of EN-1 sets out the relevant generic requirements for major energy infrastructure.

3.2.24 Brownfield land is previously developed land as defined in the government's National Planning and Policy Framework (NPFF).[24] Brownfield land is often located in, or adjacent to, urban and industrial areas. As explained in section 3.1 of this National Policy Statement, no local population density restriction applies to fusion energy infrastructure making such locations viable options.

3.2.25 Locating fusion energy infrastructure on or near former energy sites can also leverage existing network connections and infrastructure and can deliver local economic benefits and revitalise former industrial heartlands by creating new employment opportunities. In addition, the use of brownfield land presents opportunities for soil and groundwater remediation prior to development. Remediation can improve land quality inherited from previous industrial use and deliver environmental benefits.

3.2.26 Using brownfield land for fusion energy infrastructure aligns with the NPPF to prioritise brownfield development, better utilise existing land in built-up areas and preserve undeveloped land. This approach supports the government's wider agenda for sustainable land use and environmental enhancement. Whilst brownfield land is prioritised, this does not preclude the use of greenfield sites.

3.2.27 The applicant should refer to local brownfield land registers and give due consideration to the siting of fusion energy infrastructure on, or partially on, brownfield land, where such land is suitable and available. Where brownfield land is suitable and available for the proposed development in close proximity to the selected site and not selected for siting, the applicant should explain why.

3.2.28 Applicants must consider opportunities for soil and groundwater remediation prior to development and demonstrate how soil protection and remediation opportunities have been integrated into site assessment. Applicants should complete a viability and practicability assessment of any remediation strategy and large-scale earthworks, particularly if historical landfills or waste deposits are being developed on.

[24] Ministry of Housing, Planning and Local Government (2024) 'National Planning and Policy Framework'

3.2.29 The applicant and the Secretary of State must apply the 'Land Use, Including Open Space, Green Infrastructure, and Green Belt' section of EN-1. The Secretary of State must also consider the extent to which the applicant has taken reasonable steps to identify and assess brownfield land options and has considered opportunities for soil and groundwater remediation measures.

3.3 Safety and security

Seismic activity

3.3.1 The 'Land Use, Including Open Space, Green Infrastructure, and Green Belt' section of EN-1 sets out the relevant generic requirements for major energy infrastructure in relation to land instability.

3.3.2 As for many technologically advanced facilities, fusion energy infrastructure could be impacted by land instability, including that caused by seismic activity. It is important for applicants to demonstrate how their proposed project will mitigate or avoid potential impacts of seismic activity for reasonable scenarios.

3.3.3 The applicant must include within their application an assessment of any risks posed by seismic hazards to the proposed infrastructure during its whole lifecycle and provide details of appropriate mitigations to any significant risks.

3.3.4 The applicant and the Secretary of State must apply the 'Land Use, Including Open Space, Green Infrastructure, and Green Belt' section of EN-1. The Secretary of State must also be satisfied that any significant risks posed by seismic hazards will be appropriately mitigated.

Emergency planning

3.3.5 Fusion energy infrastructure will contain a radiological inventory due to the presence of tritium (which fuels the fusion reactions) and other materials that are activated by the fusion reactions. Publicly available studies of potential accident scenarios indicate fusion energy infrastructure may not be expected to require more than an outline emergency planning zone due to the low identified radiological risk.[25] However, the exact amount of emergency planning required will depend on the radiological inventory, design and the specific fusion technology of the infrastructure and must be assessed prior to operation.

[25] UK Atomic Energy Authority (2021) 'Technology Report – Safety and Waste Aspects of Fusion Power Plants' Issue 1, page 31, which draws on Health and Safety Executive (2019) 'The Radiation (Emergency Preparedness and Public Information) Regulations 2019: Approved Code of Practice', Appendix 2

3.3.6 Regulatory requirements on emergency planning are set out in the Radiation Emergency Preparedness and Public Information Regulations 2019 (REPPIR).[26] Applicants must include appropriate hazard evaluation and consequence assessments, mitigations, and assurances to demonstrate they understand and can meet the regulatory requirements around radiation emergencies.

3.3.7 The Secretary of State must be satisfied that suitable emergency planning arrangements can be put into place for the proposed fusion energy infrastructure as set out in this national policy statement.

Security

3.3.8 The 'Security Considerations' section of EN-1 sets out the national security requirements that apply to all major energy infrastructure.

3.3.9 The applicant and the Secretary of State must apply the 'Security Considerations' section of EN-1.

Storage and processing of radioactive material and waste

3.3.10 The 'Resource and Waste Management' section of EN-1 sets out the generic requirements for the management of non-radioactive hazardous and non-hazardous waste generated by major energy infrastructure.

3.3.11 Radioactive material that is at the end of its useful life and needs to be disposed of is classified as radioactive waste. Specific considerations regarding radioactive waste from fusion energy infrastructure are set out below, and should be applied instead of the paragraphs concerning radioactive waste in the 'Resources and Waste Management' section of EN-1 (including insofar as they refer to Section 2.11 and Annex B of EN-6).

3.3.12 In fusion energy infrastructure, radioactive materials will primarily arise from neutron activation and/or tritium contamination, and will need to be suitably managed, minimised, and potentially disposed of as waste if it cannot be reused or recycled. Whilst radioactive materials will be produced during the operation of a fusion energy facility, the majority of waste processing and classification is likely to occur during decommissioning.

[26] Health and Safety Executive (2019) 'The Radiation (Emergency Preparedness and Public Information) Regulations 2019: Approved Code of Practice'

3.3.13 Waste from fusion energy infrastructure is expected to fall into the Low or Intermediate Level Waste categories (LLW or ILW). Waste from fusion energy facilities classified as ILW is anticipated to be 'less hazardous ILW', as discussed in the 2024 UK policy framework "Managing radioactive substances and nuclear decommissioning: UK policy framework".[27]

3.3.14 Some radioactive materials may require storage on the site of the fusion energy infrastructure prior to classification and potential disposal. Such storage could take place during operation and throughout decommissioning.

3.3.15 Where storage infrastructure for radioactive material produced by the proposed fusion energy infrastructure will be within the site of the proposed fusion energy infrastructure, the Secretary of State must consider it part of the proposed fusion energy infrastructure and so it will fall within the scope of this National Policy Statement, EN-1 and other relevant National Policy Statements.

3.3.16 The UK has robust regulatory systems governing the management of radioactive material, and the processes for its storage, transport and disposal. Applicants must demonstrate that all waste arising across the whole lifecycle of the fusion energy infrastructure can be managed in full compliance with all relevant regulatory requirements.

3.3.17 The applicant and the Secretary of State must apply the 'Resource and Waste Management' section of EN-1 in relation to the management of non-radioactive hazardous and non-hazardous waste generated by fusion energy infrastructure. The Secretary of State must also be satisfied that radioactive waste from the fusion energy infrastructure can be managed in full compliance with all relevant regulatory requirements.

3.3.18 The Secretary of State must consider proposals for waste management facilities and/or facilities for radioactive material storage in the same way as the fusion energy infrastructure itself, when they either form part of the fusion energy infrastructure, or constitute 'associated development' for the purposes of the Act.

Human health and wellbeing

3.3.19 The 'Health' section of EN-1 sets out the generic health requirements for major energy infrastructure.

[27] Department for Energy Security and Net Zero, Scottish Government & Department of Agriculture and Rural Affairs, Welsh Government (2024) 'UK policy framework for managing radioactive substances and nuclear and decommissioning'

3.3.20 The fuel proposed for most fusion energy devices is a combination of deuterium and tritium. Deuterium is a stable isotope of hydrogen. Tritium is also an isotope of hydrogen but is a source of ionising radiation and can contaminate materials. Radioactive material can also be generated in fusion energy infrastructure from neutron interactions that can result in neutron activation. Radiation from fusion energy infrastructure will be subject to appropriate regulation and will require careful management during its operation and decommissioning. However, research suggests that fusion energy infrastructure presents very low radiological risk.[28]

3.3.21 As explained in section 2.3 of this National Policy Statement, all new classes or types of practice resulting in exposure to ionising radiation are subject to Regulatory Justification, and this will include fusion energy facilities.

3.3.22 The applicant and the Secretary of State must apply the 'Health' section of EN-1. The Secretary of State must also have regard to any relevant Regulatory Justification decision when considering impacts on human health and wellbeing and must act on the basis that the UK's regulatory regime will be properly applied and enforced to protect human health.

Proximity to military activities

3.3.23 The 'Civil and Military Aviation and Defence Interests' section of EN-1 sets out the generic requirements for major energy infrastructure and military activities.

3.3.24 Fusion energy infrastructure is not expected to pose any specific risks to military activities, but applicants must nevertheless engage with the Ministry of Defence on the location and design of the proposed fusion energy infrastructure prior to making an application for development consent. Applicants must provide the Ministry of Defence with the information it requests to assess the likelihood that the proposed fusion energy infrastructure will be acceptable from the perspective of defence interests and national security.

3.3.25 The applicant and the Secretary of State must apply the 'Civil and Military Aviation and Defence Interests' section of EN-1. The Secretary of State must also consult the Secretary of State for Defence on any conditions that may need to be included as part of any consent granted.

Proximity to major hazards

3.3.26 The 'Safety' and 'Hazardous Substances' sections of EN-1 set out the generic requirements for major energy infrastructure and major hazards.

[28] UK Atomic Energy Authority (2021) 'Technology Report – Safety and Waste Aspects of Fusion Power Plants' Issue 1, page 31

3.3.27 Fusion energy infrastructure could be impacted by major hazard sites, major accident hazard pipelines and licensed explosive sites. Fusion energy infrastructure could also pose risks to such sites and pipelines, for example where construction activities could undermine their integrity.

3.3.28 The applicant and the Secretary of State must apply the 'Safety' and 'Hazardous Substances' sections of EN-1.

Proximity to civil aircraft and spacecraft movements

3.3.29 The 'Civil and Military Aviation and Defence Interests' section of EN-1, sets out the generic civil aircraft requirements for major energy infrastructure.

3.3.30 Spacecraft movements pose the same issue for major energy infrastructure as the movements of civil aircraft. The applicant should therefore apply the approach in the 'Civil and Military Aviation and Defence Interests' section of EN-1 to spacecraft movements.

3.3.31 The applicant and the Secretary of State must apply the 'Civil and Military Aviation and Defence Interests' section of EN-1 and must apply the policy set out in the 'Civil and Military Aviation and Defence Interests' section of EN-1 to the possible effects of spacecraft movements.

3.4 Operational

Size of site

3.4.1 It is important for applicants to identify a sufficiently large site to accommodate all the buildings and facilities needed for the fusion energy infrastructure for the whole of its lifecycle. The size of the site directly impacts the safety, security, and operational efficiency of the infrastructure. A well-sized site may also provide flexibility for future expansions or modifications. Applicants wishing to deploy fusion devices in multiple phases may apply for a single Development Consent Order which provides for development in phases – see section 2.6 of this National Policy Statement for more details.

3.4.2 The site of any fusion energy infrastructure must include:

A. the terrestrial or marine area on which energy would be generated and which is needed for any transmission infrastructure

B. the terrestrial or marine area for 'associated development' to support the fusion energy infrastructure, including its safe and secure construction, operation and decommissioning

C. other terrestrial or marine areas used to mitigate and/or compensate for impacts, which may be conjoined to the land on which energy would be generated, or separate

3.4.3 The applicant must set out how and when the terrestrial and/or marine area composing the proposed site will be used and how this enables the efficient, effective, safe and secure construction, operation and decommissioning of the fusion energy infrastructure including the storage of any radioactive materials onsite. This must include any 'associated development' or terrestrial or marine area required to mitigate and/or compensate for impacts.

3.4.4 The applicant should assess the potential to further develop the site to accommodate future upgrades, expansion or even changes in technology, and the land required to mitigate and/or compensate for the impacts of that further development.

3.4.5 The applicant must ensure their proposals secure adequate land to exercise effective control over access to, and activities on and around, the proposed fusion energy infrastructure.

3.4.6 The Secretary of State must be satisfied the proposed site can accommodate the proposed fusion energy infrastructure, including any areas needed to mitigate and/or compensate for impacts, safely and securely for the whole of its lifecycle.

Access to cooling

3.4.7 All fusion energy infrastructure is expected to require cooling during its operation but the detailed specifications for cooling systems are likely to vary. There are a range of cooling system types available:

A. direct, or once-through, wet cooling systems

B. indirect, or recirculating, wet cooling systems such as natural draught towers (e.g. hyperboloid cooling towers) or low-profile mechanical draught towers

C. dry cooling systems, such as dry coolers or condensers

D. hybrid cooling systems that combine recirculating wet and dry cooling elements

3.4.8 Wet cooling systems can require a significant quantity of cooling water and may require the infrastructure using such systems to be adjacent to the sea, a river or a large body of water.

3.4.9 The applicant should assess at an early stage whether the need to implement the 'mitigation hierarchy' set out in EN-1, and the need for reasonable alternatives to be considered, may make a proposed cooling solution less suitable than an alternative from an overall cost and delivery perspective.

3.4.10 The applicant must demonstrate that the proposed site can reliably provide sufficient cooling capacity for the whole lifecycle of the fusion energy infrastructure.

3.4.11 The Secretary of State must be satisfied that any proposed cooling system is appropriate for the proposed fusion energy infrastructure and that any significant residual effects of the proposed cooling system will be adequately managed through applying the 'mitigation hierarchy' as set out in EN-1.

Network connection

3.4.12 The 'Network Connection' section of EN-1, and the National Policy Statement for Electricity Networks Infrastructure (EN-5), set out the relevant generic requirements for network connections.

3.4.13 Strong and reliable electricity network infrastructure is essential for efficiently transmitting energy from electricity generating infrastructure to end-users. Fusion energy infrastructure that intends to supply electricity to the grid therefore needs a suitable network connection.

3.4.14 Fusion energy infrastructure may also require a network connection capable of drawing significant power to initiate or 'ramp up' the fusion process before energy generation begins.

3.4.15 The applicant and the Secretary of State must apply the 'Network Connection' section of EN-1 as well as, where relevant, EN-5.

3.5 Developmental

Socioeconomic

3.5.1 The 'Socio-Economic Impacts' section of EN-1, sets out the relevant generic socioeconomic requirements for major energy infrastructure.

3.5.2 The potential socioeconomic benefits of fusion energy infrastructure may be increased through co-location with sectors that can maximise the use of its clean energy and high temperature heat outputs, such as AI data centres.

3.5.3 Such co-location supports efficient land use, infrastructure sharing (e.g. cooling systems, network connections etc.) and the creation of high-skilled jobs, aligning with broader goals including regional economic growth.

3.5.4 Applicants must explain how they have sought to identify and maximise socioeconomic benefits from co-location opportunities.

3.5.5 The applicant and the Secretary of State must apply the 'Socio-Economic Impacts' section of EN-1. The Secretary of State must also consider the extent to which the applicant has sought to identify and maximise the socioeconomic benefits of the proposed fusion energy infrastructure through opportunities for co-location.

Local impacts

3.5.6 The ‘Dust, Odour, Artificial Light, Smoke, Steam, and Insect Infestation’, ‘Land Use, Including Open Space, Green Infrastructure, and Green Belt’, ‘Noise and Vibration’ and ‘Traffic and Transport’ sections of EN-1 set out the relevant generic requirements for major energy infrastructure.

3.5.7 The operation of fusion energy infrastructure is unlikely to be associated with significant noise, vibration or air quality impacts. But, like all major energy infrastructure, such impacts are expected to be part of constructing and decommissioning fusion energy infrastructure and appropriate mitigation measures should be applied.

3.5.8 The application of Good Design (see section 2.2 of this National Policy Statement) can minimise adverse local impacts and deliver enhancements to the local environment, infrastructure and community identity.

3.5.9 The applicant and the Secretary of State must apply the ‘Dust, Odour, Artificial Light, Smoke, Steam, and Insect Infestation’, ‘Land Use, Including Open Space, Green Infrastructure, and Green Belt’, ‘Noise and Vibration’ and ‘Traffic and Transport’ sections of EN-1.

4 Annex of bodies to engage

EN-8 consideration	Non-exhaustive list of bodies that applicants are advised to engage with for each EN-8 consideration[29,30]
Flooding	• Environment Agency • Natural Resources Wales • Welsh Government • Marine Management Organisation • Lead Local Flood Authorities • District and Borough Councils • Water and Sewerage Companies • Water Only Companies • Water Retailers • Internal Drainage Boards • Coast Protection Authorities • Highway Authorities
Landform change.	• Environment Agency • Natural Resources Wales • Welsh Government • Marine Management Organisation • Coast Protection Authorities • Local Authorities
Biodiversity and geological conservation	• Environment Agency • Natural Resources Wales • Welsh Government • Natural England • Department for Environment, Food and Rural Affairs • Marine Management Organisation • Local Planning Authorities • National Park Authorities (including the Broads Authority) • National Landscape Conservation Boards

[29] See Section 3.1 of this NPS for details about statutory consultees.
[30] Some bodies only apply in England or Wales, not both.

EN-8 consideration	Non-exhaustive list of bodies that applicants are advised to engage with for each EN-8 consideration[29,30]
Areas of amenity, historic environment and landscape value	• Natural England • Historic England • Cadw • Heneb: The Trust for Welsh Archaeology • Planning Inspectorate • Local Authorities • Welsh Government • Marine Management Organisation • National Park Authorities (including the Broads Authority) • National Landscape Conservation Boards Note: engaging early with Historic England and/or Cadw may help to mitigate and/or avoid disruption to development caused by archaeological discovery.
Water quality and the marine environment	• Environment Agency • Natural Resources Wales • Natural England • Historic England • Marine Management Organisation • Water Companies
Brownfield land	• Environment Agency • Natural Resources Wales • Local Authorities
Seismic activity	• Environment Agency • Natural Resources Wales
Emergency Planning	• Local Authorities • Environmental Agency • Natural Resources Wales
Security	• Department for Energy Security and Net Zero • National Protective Security Authority • National Cyber Security Centre
Storage and processing of radioactive material and waste	• Environment Agency • Natural Resources Wales • Health and Safety Executive • Office of Nuclear Regulation (for the transport of radioactive materials via land, rail and inland waterway) • Department for Transport (for the transport of other hazardous materials)

EN-8 consideration	Non-exhaustive list of bodies that applicants are advised to engage with for each EN-8 consideration[29,30]
Human health and wellbeing	• UK Health Security Agency
Proximity to military activities	• Defence Infrastructure Organisation (DIO-Safeguarding-Statutory@mod.gov.uk) or DIO Estates - Safeguarding Team, Defence Infrastructure Organisation, St George's House, DMS Whittington, Lichfield, Staffordshire, WS14 9PY
Proximity to major hazards	• Hazardous Substances Authority • Health and Safety Executive Note: consulting these bodies is essential if a hazardous substances consent is likely to be needed
Proximity to civil aircraft and spacecraft movements	• Civil Aviation Authority • NATS[31] • Relevant aerodromes where radar or air traffic service impacts are possible
Size of site	• Planning Inspectorate • Environment Agency • Natural Resources Wales
Access to cooling	• Environment Agency • Natural Resources Wales • Natural England • Marine Management Organisation • Water Companies
Network connection	• National Energy System Operator • Relevant Distribution Network Operator • National Grid Electricity Transmission
Socioeconomic	• Local authorities
Local impacts	• National Highways • Highways Authority • South Wales Trunk Road Agent • North and Mid Wales Trunk Road Agent • Local authorities • Parish council • Community groups

[31] NATS is the UK's leading provider of air traffic control services. See: About us - NATS

5 Glossary

There is a glossary in each of the energy National Policy Statements. The glossary set out in each of the technology specific National Policy Statements may also be useful when reading this National Policy Statement.

Associated development	Associated development as defined in section 115(2) of the Planning Act 2008.
Critical National Priority (CNP)	A policy set out in the Critical National Priority for Low Carbon Infrastructure section of EN-1 which applies a policy presumption that, subject to any legal requirements (including under section 104 of the Act), it is likely that the urgent need for Critical National Priority Infrastructure in achieving our energy objectives, together with the national security, economic, commercial, and net zero benefits, will outweigh any other residual impacts not capable of being addressed by application of the 'mitigation hierarchy', in all but the most exceptional circumstances. Critical National Priority Infrastructure is defined as nationally significant low carbon infrastructure. Low carbon infrastructure means: • for electricity generation, and all onshore and offshore enabling electricity generation that does not involve fossil fuel combustion (that is, renewable generation, including anaerobic digestion plants, provided they meet existing definitions of low carbon; and nuclear generation, including fusion energy), as well as natural gas fired generation which is carbon capture ready; • for electricity grid infrastructure, all power lines in scope of EN-5 including network reinforcement and upgrade works, and associated infrastructure such as substations. This is not limited to those associated specifically with a particular generation technology, as all new grid projects will contribute towards greater efficiency in constructing, operating and connecting low carbon infrastructure to the National Electricity Transmission System; • for other energy infrastructure technologies, fuels, pipelines and storage infrastructure which fits within the normal definition of "low carbon", such as hydrogen production and distribution, and carbon dioxide distribution;

	• for energy infrastructure which are directed into the NSIP regime under section 35 of the Act, and fit within the normal definition of “low carbon”, such as interconnectors, Offshore Hybrid Assets, or ‘bootstraps’ to support the onshore network which are routed offshore; and • lifetime extensions of nationally significant low carbon infrastructure, and repowering of projects.
Fusion energy device	The system at the heart of a fusion energy facility where the fusion reaction occurs.
Fusion energy facility	A site containing one or more fusion energy devices and the systems required for their operation, including any infrastructure necessary to support construction, operation, decommissioning, and any storage of radioactive materials onsite.
Fusion energy infrastructure	Infrastructure using the process of fusion to generate energy, and any ancillary infrastructure, that is: A. defined as a nationally significant infrastructure project by the Act, or B. treated as development for which development consent is required according to sections 35 and 35ZA of the Act.
Fusion energy reactions	Reactions that fuse light nuclei (typically using deuterium and tritium) producing neutrons and releasing energy.
Fusion regulators	As defined in Section 2.4 the Fusion Regulators for the purposes of this National Policy Statement are the Health and Safety Executive (HSE) and either Environment Agency (EA) or Natural Resources Wales (NRW) (depending on location of site).
Mitigation Hierarchy	A term to incorporate the avoid, reduce, mitigate, compensate process that applicants need to go through to protect the environment and biodiversity.
NSIP	nationally significant infrastructure project.
Regulatory Justification	The process required under the Justification of Practices Involving Ionising Radiation Regulations 2004 by which all new classes or types of practice resulting in exposure to ionising radiation are “justified” (by their economic, social or other benefits in relation to the health detriment they may cause) in advance of being first adopted or first approved.

STEP	Spherical Tokamak for Energy Production - a prototype fusion power plant which UK Fusion Energy propose to construct at West Burton, UK.
The Act	The Planning Act 2008 (as amended).
Whole Lifecycle	The whole lifecycle of fusion infrastructure means its construction, operation and decommissioning, including any storage of radioactive materials onsite.
UKAEA	UK Atomic Energy Authority, an executive non-departmental public body sponsored by the Department for Energy Security and Net Zero.
UKFE	UK Fusion Energy, the body formerly known as UKIFS.
UKIFS	UK Industrial Fusion Solutions was the former name for a subsidiary of the UK Atomic Energy Authority (UKAEA) which is now called UK Fusion Energy (UKFE).

This publication is available at:
www.gov.uk/government/consultations/draft-national-policy-statement-for-fusion-energy-generation-en-8

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

If you need a version of this document in a more accessible format, please email alt.formats@energysecurity.gov.uk. Please tell us what format you need. It will help us if you say what assistive technology you use.

ISBN 978-1-5286-6601-5
E03626413 06/26