

REPORT OF THE SERVICE DIRECTOR OF GREEN GROWTH, INVESTMENT AND ASSETS

CONSULTATION ON A NEW NATIONAL POLICY STATEMENT FOR FUSION ENERGY

Purpose of the Report

1. To provide an update to the Cabinet Member regarding the Department for Energy Security & Net Zero (DESNZ) consultation on the development of a new Fusion Energy National Policy Statement, the Appraisal of Sustainability Scoping Report and the County Council's proposed responses to the specific questions contained in both consultation documents.

What are National Policy Statements

2. National Policy Statements (NPSs) set out the Government's objectives and policy for the development of nationally significant infrastructure and provide the framework within which the Planning Inspectorate makes recommendations to the relevant Secretary of State as to whether major infrastructure development should proceed or not.
3. There are currently six NPSs relevant to energy applying in England and Wales. Energy NPS (EN-1) acts as the overarching NPS to the five technology NPSs. The fusion NPS would be additional to the existing NPS and be referenced EN-8.

Fusion Background

4. Fusion energy has the potential to deliver a long term, low-carbon and safe energy source to meet expected rising energy demand, not only within the UK but across the globe. The UK has been at the forefront of fusion energy development for decades and is in a unique position to capitalise on the social and economic benefits of this technology.
5. For context, the commercialisation of fusion energy is accelerating rapidly. The global fusion industry as of 2023 had attracted over \$6 billion in investment. This was an increase of \$1.4 billion over the same figure in 2022.
6. The UK Atomic Energy Authority (UKAEA) has chosen to site the STEP prototype fusion power plant at the former West Burton power station in Bassetlaw. However, private fusion companies from the UK and overseas are also looking to develop demonstrator fusion facilities. An American fusion start up, has already visited Nottinghamshire twice over the last year looking at potential sites.

Current fusion policy 'landscape'

7. In 2022, the Government published a response to the Fusion Regulation Green Paper confirming that fusion will be regulated under a different framework than nuclear fission due to its lower hazard status. This approach was then confirmed through the Energy Act 2023, making the UK the first country to legislate for fusion regulation.
8. The overarching National Policy Statement for Energy (EN-1) also states that fusion can be part of the effort to secure the UK's energy security and meet long term goals.
9. To ensure that the fusion industry can plan with confidence to locate within, and commercialise fusion technology in the UK, The Government has identified the need for a fusion specific National Policy Statement (NPS). The NPS will provide clarity to developers, statutory organisations and local authorities, and streamline the planning process for fusion, aligning it with other energy generating technologies.

Consultation on the new NPS for fusion energy

10. The fusion NPS EN-8 will support the commercialisation of fusion as the industry moves from experimental fusion facilities to prototype power-plants and beyond.
11. The consultation documents contain a number of broad topic headings which set out the key proposals followed by a number of questions. This report will summarise the key topic areas, with the individual questions and the county council's draft responses set out in Appendix A.
12. The topic headings within the consultation document and summary are as follows:

The 'proposals'

13. A number of different technologies / approaches are being explored by companies to find the most efficient / sustainable way to create fusion. As a result, it is proposed the NPS will take an agnostic approach to the exact technology used, supporting all fusion technologies.
14. The NPS proposes an open-sited, developer led approach. This will place the responsibility on the developer to identify a suitable site and to undertake site characterisation and assessment which will then be scrutinised by regulators (where applicable).
15. The NPS proposes including all fusion electricity producing stations in England in the NSIP process.
16. Through the proposed NPS, the Government is clarifying that fusion energy facilities (at whatever scale) will be incorporated into the approval process for Nationally Significant Infrastructure Projects. This means even the smallest proposal will not be determined by the relevant local planning authority but by the Secretary of State following examination and a report submitted an independent Planning Inspector. This would remove local planning powers from local planning authorities.
17. Fusion may have a large role in producing high-grade heat for other industrial processes such as hydrogen production. The consultation proposes amending the Planning Act 2008 to clarify that the output of an energy producing facility includes both electrical and thermal output for the purposes of the NSIP process.

18. Fusion energy facilities are not yet deployable in the UK, and therefore there is not enough certainty to apply a deployment deadline. As a result, it is not proposed to apply a deadline to fusion energy facilities.

Strategic siting assessment criteria

19. The overarching NPS for Energy sets out the general principles that should be applied in the assessment of development consent applications across a range of energy applications. It is expected that the Strategic Siting Criteria, as set out in the Energy NPS and the new fusion NPS, will mostly follow precedent from other energy generating facilities with similar characteristics and therefore there will be few areas that are unique to fusion.

20. The NPS proposes the following consideration of the strategic merits of a site compared to other alternatives:

- Developers are expected to conduct a thorough assessment of the proposed site and compare it to other potential solutions to achieving their development. Strategic factors, such as geological suitability, environmental impact (such as ground and surface water), safety, proximity to existing infrastructure such as transport connectivity, and potential social and economic implications.
- The developer should demonstrate strong strategic merits that make their chosen site a compelling choice for fusion development in comparison to alternatives. The site should also be evaluated for its compatibility with the specific fusion technology and facility being considered.
- Developments should consider public feedback and concerns when evaluating the strategic merits of their proposed site.

21. The consultation document also identifies the range of environmental and socio-economic impacts that will need to be included as part of any site assessment process. It is worth noting that this list contains many of the standard areas that would be considered as part of a large planning application/development. Pages 23-30 provide some guidance on locational factors and seem to contradict the earlier statements about an "open sited" policy. Maybe this section should say that Protected Landscapes should be avoided when examining sites for fusion. It seems that grid connection, cooling facilities and separation from residential areas in case of incidents are fundamental locational requirements.

Implementation of a fusion NPS

22. The consultation document sets out how a project will be considered during the DCO process and seeks views on the proposed model.

Appraisal of Sustainability Scoping (AoS) report

23. The main purpose of an AoS is to examine the likely social, economic, and environmental effects of designating an NPS. If potential significant adverse effects are identified, the AoS recommends options for avoiding or mitigating such effects.

24. Consultation on this Scoping Report is therefore aimed at ensuring that the AoS will be comprehensive and robust in supporting the emerging fusion energy NPS EN-8 by gathering early views on how the AoS should be developed.

25. Comments are being sought on how the evidence gathering and proposed AoS framework could be improved or clarified.

26. As set out before the questions and the County Council's responses to the AoS are set out in Appendix A.

Timetable

27. The consultation on the fusion NPS and the associated AoS closes on the 3 July 2024.

Statutory and Policy Implications

28. This report has been compiled after consideration of implications in respect of crime and disorder, data protection and information governance, finance, human resources, human rights, the NHS Constitution (public health services), the public sector equality duty, safeguarding of children and adults at risk, service users, smarter working, sustainability and the environment and where such implications are material they are described below. Appropriate consultation has been undertaken and advice sought on these issues as required.

Financial Implications

29. This is a response to a consultation and has no financial implications for the Council.

RECOMMENDATION

That the Cabinet Member for Economic Development & Asset Management:

- 1) Approves the submission of the comments drafted in response to the Department of Energy Security & Net Zero consultation on a new National Policy Statement for Fusion Energy and Appraisal of Sustainability Scoping Report by the deadline date of 3 July 2024.

Wayne Bexton

Service Director, Green Growth, Investment and Assets

For any enquiries about this report please contact: Steven Osborne-James, steven.osborne-james@nottsc.gov.uk, Tel: 0115 9772109

Constitutional Comments (CM 20/06/2024)

30. The recommendations fall within the remit of the Cabinet Member – Economic Development and Asset Management through that cabinet member's terms of reference.

Financial Comments (PAA29 18/06/2024)

31. There are no specific financial implications arising directly from this report.

Background Papers and Published Documents

Except for previously published documents, which will be available elsewhere, the documents listed here will be available for inspection in accordance with Section 100D of the Local Government Act 1972.

[Fusion energy facilities: new National Policy Statement and proposals on siting - GOV.UK \(www.gov.uk\)](http://www.gov.uk)

Electoral Division(s) and Member(s) Affected

- All.