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Letter sent by email to:
newnuclearnps.consultation@energysecurity.gov.uk

To: Department of Energy Security and Net Zero

National policy statement for new nuclear power generation: approach to siting new nuclear power stations beyond 2025.

Please find in the appendix below the response from Essex County Council (ECC) to the thirteen questions contained in the above open consultation. ECC welcomes the opportunity to engage with DESNZ on the new national policy statement (NPS) for nuclear (EN-7) and is supportive of the government’s recognition of the economic growth potential that new nuclear could provide as part of the transition to net zero.

Essex and our East of England neighbouring counties form part of an important ‘energy coast’ and form part of a region that has the experience and skilled workforce of delivering a wide range of energy generation and transmission infrastructure projects, including multiple consented and proposed nationally significant infrastructure projects.

ECC would take this opportunity to strongly recommend that the next draft of NPS EN-7 is worded to ensure that the designation status of the strategic sites listed in NPS EN-6 as suitable for the deployment of new nuclear before 2025, which include the former nuclear site at Bradwell-on-Sea in Essex, is made clear. ECC, its local authority partners and host communities in Maldon have already lived with over a decade of uncertainty about the future development of Bradwell-on-Sea for new nuclear. ECC strongly recommends that the new NPS EN-7 does not result in more uncertainty as to the future of Bradwell-on-Sea or for any of NPS EN-6 sites.

The strategic sites in NPS EN-6 were made based on robust assessment criteria. To meet the government’s commitment to 24 Gigawatt (GW) of nuclear energy by 2050, ECC understands that more sites will be required to support the deployment of smaller scale and advanced nuclear technologies. ECC supports the retention of NPS EN-6 strategic sites for new nuclear, including for smaller scale and advanced technologies, and the introduction of the same robust criteria being applied to other (non-NPS EN-6) sites, so that they can also be deployed for new nuclear uses.

ECC are concerned that the current consultation is not clear about the status of the strategic sites in NPS EN-6 once the new NPS EN-7 is designated. Given that the strategic sites in NPS EN-6 were selected on the basis of the same criteria now proposed for NPS EN-7, ECC strongly recommends that NPS EN-7 specifically carries forward the previously assessed NPS EN-6 sites, including Bradwell-on Sea, for the deployment of all new nuclear technologies.

ECC notes that the future planned use of current nuclear licensed sites is an important driver for remediation. In many cases new nuclear is a preferred or suitable next use. ECC would also take this opportunity to request that the Nuclear Decommissioning Authority provide an updated position on its position relating to the preferred or suitable next use of Bradwell A.

Yours sincerely

Graham Thomas.

Graham Thomas
Head of Planning and Sustainable Development

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ECC's response to the 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 agree.

The UK Government's Energy Security Strategy and Civil Nuclear Roadmap, and the defined role of Great British Nuclear (GBN) envisages the development of Small Modular Reactors (SMRs) as well as a Gigawatt (GW) scale power station. The energy mix may also include Advanced Modular Reactors (AMRs) in future. It is therefore entirely logical for the new NPS EN-7 to cover the spectrum of technologies from micro to large scale.

ECC is concerned that as currently worded, a new NPS for nuclear energy generation may impact or raise uncertainties regarding the designation status of the existing strategic sites designated in NPS EN-6. It strongly recommended that the next draft of NPS EN-7 is worded to ensure that the designation status of the NPS EN-6 sites is made completely clear and does not create any further uncertainties.

ECC notes that fusion reactors will be covered by a separate NPS (3.2.5). ECC agrees that this is appropriate.

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 agree but with concern.

ECC strongly agree but raises a major concern regarding the status of the strategic sites in NPS EN-6, including Bradwell-on-Sea that will not have been deployed for new nuclear uses before 2025.

The strategic sites in NPS EN-6 were made on the basis of robust assessment criteria. To meet the government's commitment to 24 Gigawatt (GW) of nuclear energy by 2050, ECC understands that more sites will be required to support the deployment of smaller scale and advanced nuclear technologies. ECC supports the retention of NPS EN-6 strategic sites for new nuclear, including for smaller scale and advanced technologies, and the introduction of the same robust criteria being applied to other (non-NPS EN-6) sites, so that they can also be deployed for new nuclear uses.

ECC are concerned that the current consultation is not clear about the status of the strategic sites in NPS EN-6 once the new NPS EN-7 is designated. Given that the strategic sites in NPS EN-6 were selected based on the same criteria now proposed for NPS EN-

7, ECC strongly recommends that NPS EN-7 specifically carries forward the previously assessed NPS EN-6 sites, including Bradwell-on Sea, for the deployment of all new nuclear technologies.

ECC notes in the consultation that strategic sites in NPS EN-6 ‘...will retain inherent positive attributes that make them suitable for consideration for development’ (3.2.8). The reality is that some of the strategic sites in NPS EN-6 such as, Bradwell-on-Sea may be more suitable for smaller scale nuclear technologies than GW-scale. Although considered by government and industry as suitable for GW-scale, the stalled Bradwell B project has demonstrated that the site could not be developed without requiring visually intrusive cooling towers, as the marine environment is too shallow for direct cooling. The lack of local highway infrastructure and the ground conditions at site also make the construction of GW-scale extremely challenging, which drives up the cost.

ECC notes that the future planned use of current nuclear licensed sites is an important driver for remediation. In many cases new nuclear is a preferred or suitable next use. ECC, its local authority partners and host communities in Maldon have already lived with over a decade of uncertainty about the future development of Bradwell-on-Sea for new nuclear. ECC strongly recommends that the new NPS EN-7 does not result in more uncertainty as to the future of Bradwell-on-Sea or for any of NPS EN-6 sites.

ECC would also take this opportunity to request that the Nuclear Decommissioning Authority provide an updated position on the preferred or suitable next use of Bradwell A.

The starting point for NPS EN-7 should be to retain those sites identified under NPS EN-6 but to employ robust criteria to assess other sites that come forward. As the NPS EN-6 sites have already been assessed as potentially suitable for GW scale technologies, it would seem unlikely that they are not potentially suitable for smaller scale and advanced new nuclear technologies that have reduced environmental impacts.

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 agree.

ECC strongly agree that it is sensible for the new nuclear siting policy to take an unrestricted approach to timescales.

Experience has shown that setting artificial deadlines for the delivery of new nuclear has not worked. While it is to be hoped that the current momentum in seeking to deliver new nuclear as a key driver of net zero will be maintained, the setting of policy deadlines for delivery is unlikely to alone ensure timely delivery. It will be other mechanisms such as, GBN and the new nuclear technologies competitions and incentives that are likely to contribute to timely delivery.

As set out in response to Q1 and Q2, ECC strongly recommended that the next draft of NPS EN-7 is worded to ensure that the designation status of the NPS EN-6 sites is made completely clear and does not create any further uncertainties.

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?

Agree.

ECC agree with these changes but would highlight that there are further considerations. If government wishes to promote new nuclear, effective policy must sit alongside other measures, for example GBN securing access to sites and government support for new nuclear technologies, as well as appropriate funding mechanisms.

While the commitment to the Office of Nuclear Regulation (ONR) providing advice through the Planning Inspectorate process is welcome (3.2.11), the new NPS EN-7 should include a specific requirement for project promoters to secure ONR advice at the earliest possible stage in the site selection process. By helping to ensure that unsuitable sites are screened out early, efficiencies would be gained and uncertainties for host communities reduced.

Appraisals of Sustainability and Habitats Regulations Assessments should be undertaken alongside early site screening, to ensure that wider sustainable development is considered at the start of the process.

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 agree.

Given the complexities of nuclear technologies of every scale, it is logical that all nuclear generation are subject to the same robust criteria-based process of assessment, examination, and determination nationally under the Planning Act 2008, rather than being determined locally. Indeed, it is likely that some of the smaller developments will be the most innovative or novel in terms of design. These include those that produce heat or synthetic fuels or hydrogen.

Given the public concerns that can arise in relation to nuclear development, particularly in areas that do not currently host such facilities, it is imperative that all aspects of new nuclear development are assessed against robust criteria as proposed for NPS EN-6 and alongside continued rigorous safety and regulatory assessments.

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?*

ECC does not have evidence or technical information regarding fission reactors that only produce heat or synthetic fuels. Although supports bringing all types of nuclear fission outputs into the same policy and consenting regime.

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.

Agree.

In accordance with ECC's response to Q9, strongly recommend that consideration is given to NPS EN-7 requiring in principle assessment against the criteria set out in Table 1 at the pre-application stage of any proposed project.

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.

Agree, but with a queries.

Subject to the suggestion in response to Q7 that pre-application assessment of the Table 1 criteria should be required, ECC agree that the criteria set out in NPS EN-1 and NPS EN-7 and wider guidance are correctly identified. As acknowledged in site screening consultation document, some criteria may be less relevant for some sites and in effect screened out as not relevant. NPS EN-7 must make it clear that robust evidence must be required for any such screening out.

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

Given climate change and the very long timescales for the operation and decommissioning of new nuclear power stations in coastal locations, and the paramount need for new nuclear development of any scale to maintain flood resilience in the very long term, the detail of NPS EN-7 wording must be reviewed to ensure that it is robust and builds in any requirement for adaptive change to respond to unforeseen scenarios that may emerge in the future.

8b – Groundwater protection

No comment.

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

No comment.

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.

Undecided

As flood mitigation strategies and measures are critical to determining the appropriateness of siting for any new nuclear development, ECC agree with flooding being considered at the earliest possible stage in site selection and project planning.

ECC suggest that the new NPS EN-7 includes specific guidance on the timing for consideration of the potentially critical issues listed in Table 1, so that decisions can be made early on whether a proposed site is likely to be acceptable or not. This will lead to a more efficient process and greater certainty for host communities and local authorities.

ECC also reiterates its comment made in response to Q8a.

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

No comment.

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

No comment.

9c - Proximity to Civil Aircraft Movements

No comment.

9d - Nationally and internationally designated sites of ecological importance

ECC suggests that Q9b biodiversity designation criteria should be reviewed to ensure that the criteria refer not only to the designated sites themselves, but also specifically refers to the need to assess and mitigate any related impacts on adjacent areas that may be used by the species for which the site is designated.

This is particularly important for sites such as Bradwell-on-Sea, being adjacent to international and national designations on the Blackwater Estuary – where the birds (or other mobile) species relevant to these designations also use adjacent and nearby land for shelter, foraging and breeding.

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

Similarly, to comments related to Q9d, ECC recommends that the wording is reviewed to ensure that NPS EN-7 is sufficiently robust in terms of the settings to these designations.

9f - Size of site to accommodate operation.

No comment.

9g - Access to suitable sources of cooling

The NPS EN-6 strategic site at Bradwell-on-Sea site sits within the open flat landscape associated with the Dengie Peninsula and Blackwater Estuary, which is itself subject to international and national nature conservation designations. The biodiversity, landscape and visual implications of cooling facilities is a key consideration in whether certain nuclear technologies would be acceptable.

ECC strongly recommends that this criterion is qualified to ensure that not only are not only functional requirements for cooling infrastructure required to be considered, but also any key environmental implications that may constrain the nature of cooling infrastructure.

This will help ensure all key constraints that may affect siting are considered at the earliest stage in the regulatory process.

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

No comment.

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.*

Not enough information.

ECC are concerned that the proposed NPS EN-7 approach to the siting of new nuclear development beyond 2025 is not clear with respect to the future designation of the strategic sites designated in NPS EN-6. ECC recommend further clarification is provided in relation to:

- Whether the NPS EN-6 sites remain formally designated as potentially suitable for deployment of new nuclear power stations (of all scales).
- That the NPS EN-6 designated sites have already been assessed against alternative sites, and therefore this is not required for new nuclear power generation proposals of any scale on these sites. Any other sites coming forward would of course be subject to a requirement to assess alternatives.

As stated above, the NPS EN-6 sites have already been subject to a robust appraisal of alternatives. These sites should be carried forward into EN-7 (for all scales of new nuclear), with no requirement for assessment of alternatives.

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?*

As stated in ECCs response to Q2 and Q10, the strategic sites in NPS EN-6 have already been subject to a robust appraisal of alternatives. These sites should be carried forward into NPS EN-7 (for all scales of new nuclear), with no requirement for assessment of alternatives.

ECC consider that to require alternatives at this stage would likely result in further delay to the urgent need for secure, affordable, and low carbon energy. It is understood that GBN is currently considering siting for SMRs, and they have stated that all NPS EN-6 sites will be required. It would undermine this position to introduce an unnecessary additional step at this stage.

ECC is supportive of assessment of alternatives for new sites (non NPS EN-6) sites coming forward.

10b: *Radioactive waste management*

Public safety must be paramount in considering any changes with respect to nuclear related development, including in respect of radioactive waste.

It is proposed that NPS EN-7 will follow the approach taken in the already designated NPS EN-6 but that this approach will now cover smaller and advanced nuclear technologies. In relation to advanced technologies, ECC note recent work by the UK Government's Committee on Radioactive Waste Management which has highlighted a range of uncertainties and concerns about the waste legacy from some potential advanced nuclear technologies.

A 24GW new nuclear programme incorporating a significant element of such technologies is likely to require a significantly larger GDF, or potentially the development of a second facility at a future stage. ECC consider that NPS EN-7 should recognise these issues and the additional challenges that they present to radioactive waste management.

ECC also considered that community benefits should be provided for communities that host radioactive waste on behalf of the nation, whether in storage or disposal facilities.

10c: *Impacts of multiple reactors*

ECC agree that NPS EN-6 considers the cumulative effects of multiple reactors being proposed on one site, and that this assessment is relevant to smaller as well as larger technologies. It is suggested that the wording of NPS EN-7 is carefully checked to ensure that it is relevant to all scales of development.

ECC would again take the opportunity to reiterate the importance of clarity in NPS EN-7 in respect of the strategic sites designated in NPS EN-6. To provide certainty and ensure a streamlined process, it is important that NPS EN-7 includes specific wording confirming that NPS EN-6 sites remain designated as being potentially suitable for new nuclear development of all scales and including for single or multiple reactors.

10d: *Ownership of sites*

No comment

10e: *Biodiversity Net Gain*

It is important that NPS EN-7 should include specific reference to the requirement to deliver biodiversity net gain (BNG) as a part of all new nuclear developments. It would be helpful if NPS EN-7 could include reference to the appropriate legislative source for and guidance on this.

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

No comment.

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

Not enough Information.

- ECC welcomes the commitment to community and stakeholder engagement in a criterion led approach to the siting of new nuclear developments of all scales, and strongly support the commitment to early engagement with local authorities and local communities.
- ECC has concerns about the uncertainty contained in paragraph 5.2.3: *'The government believes that the sites designated in EN-6 retain inherent positive*

attributes that will make them suitable for consideration for further development. ECC question what this sentence means? It would seem to bring uncertainty to the previously established designation of NPS EN-6 sites as being potentially suitable for new nuclear development.

- ECC consider it unfortunate that parallel processes of development consent and other regulatory permitting will be retained. This is complex and onerous for both local authorities and host communities. However, it is understood that the rationalisation of the various consenting regimes is probably beyond the scope of a NPS EN-7.

Question 12: *What, if any, help from government or GBN would you expect to see to support developers with site identification?*

ECC does not have sufficient information on the role or current activities of GBN to be able to answer this question.

We strongly urge DESNZ to require that GBN engages with host local authorities and communities regarding siting for new nuclear development at the earliest opportunity. Similarly, to the other new NPSs for Energy, EN-7 should include a strong and central commitment to engaging and resourcing local authorities and host communities to be able to meaningfully engage in the development consent process. This should include site selection.

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?*

Social value and community benefits

ECC consider that social value and community benefits should be included in NPS EN-7 as mandatory for all new nuclear development. Promoters should be required to demonstrate how new nuclear development will reduce socio-economic disparities in host communities and ensure a 'just and fair' transition to net zero. Host communities should also benefit from a package of early and ongoing investment in community benefits that is provided to offset the burden and/or disturbance of hosting infrastructure in the national interest. Local authorities and host communities should be sufficiently resourced to engage meaningfully in all stages of the development consent process for new nuclear, including post consent.

Reusing brownfield land and existing infrastructure

In accordance with the recently published Civil Nuclear Roadmap to 2050, ECC strongly suggests that NPS EN-7 includes a requirement for developers promoting new nuclear development on at or adjacent to existing NDA sites to maximise the use of existing brownfield land, buildings and/infrastructure. This would offer the potential to reduce the environmental impact and cost of nuclear decommissioning, whilst providing opportunity for sustainable growth.

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

- Local authority/government representative.