# Briefing note



05 March 2024

Department for Energy Security and Net Zero consultation: Approach to siting new nuclear power stations beyond 2025.

#### 1. Introduction

- 1.1 South Gloucestershire Council hosts the 150ha NPS EN-6 site at Oldbury on Severn.
- 1.2 This Council is an active participant in the Western Gateway led Severn Edge initiative (that includes both the Oldbury and Berkeley sites) and is aware of technology promoter interest in sites both Oldbury and Berkeley and potentially from Great British Nuclear for the deployment of smaller scale nuclear technologies. To inform such engagement Western Gateway has developed a Vision¹ for Severn Edge that acknowledges the designation of the site at Oldbury for new nuclear development, its potential to contribute to net zero.
- 2. Consultation on the new approach to siting new nuclear power stations beyond 2025
- 2.1 This consultation is welcomed, as is the move to ensuring that national policy takes account of the emerging smaller scale nuclear power plant technologies.
- 2.2 In accordance with the South Gloucestershire Constitution in respect of Government consultations, this is a delegated Officer response submitted following consultation with relevant Executive and Local Members. It will be published on the National Infrastructure Project page of the South Gloucestershire website.

#### 3. Responses to the questions posed:

**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 in part, but with a major concern regarding the status of the EN-6 new nuclear sites

<sup>&</sup>lt;sup>1</sup> Severn <u>Edge | Western Gateway (western-gateway.co.uk)</u>

Given the emergence of smaller nuclear technologies that have the potential for more rapid and less impactful deployment than GW scale power stations, it is entirely logical that the new EN-7 covers the entire spectrum of technologies from micro to large scale.

However, we are concerned that as currently worded, a new NPS EN-7 may impact on or raise uncertainties regarding the designation status of the existing EN-6 sites such as Oldbury. Further clarity is required in the final EN-7 on this matter.

Given the longstanding NNB designation, the development of a Vision for Oldbury as part of the wider Western Gateway led Severn Edge initiative, Great British Nuclear's current work on siting for new nuclear, and project and technology promoter interest, including shortlisting of Oldbury by Rolls Royce SMR, it is strongly recommended that the next draft of EN-7 is worded to ensure that the designation status of the EN-6 sites is made completely clear and unambiguous.

**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?

# Strongly Agree in part, with major concerns regarding the status of the existing EN-6 sites

The original EN-6 designations were made on the basis of assessment of sites against robust criteria.

In order to meet the Government commitment to 24GW nuclear by 2050, we understand that more sites will be required including for smaller scale nuclear technologies.

We therefore support the retention of EN-6 sites for new nuclear including for smaller scale technologies, AND the introduction of robust criteria to enable other sites to come forward on other (non EN-6) sites.

However we are very concerned that the current consultation is not clear about the status of the EN-6 designated sites once the new EN-7 is designated. Given that the EN-6 sites were designated on the basis of the criteria now proposed for designation in EN-7, we strongly recommend that EN-7 specifically carries forward the previously assessed EN-6 sites for ALL scales of new nuclear power station.

The reality is that some sites (such as Oldbury) may be more suitable for smaller scale technologies, and other site/s may be more suitable for GW scale power stations. Having already been assessed as potentially suitable for GW scale technologies, given the likelihood that smaller scale technologies would be likely to result in less impact, it would seem very likely that EN-6 sites such as Oldbury are potentially suitable for smaller scale NNB technologies.

This Council and our communities have already lived with over a decade of uncertainty as to the future of the 150ha designated EN-6 site at Oldbury. We strongly recommend that the new EN-7 does not result in more uncertainty as to the future of this site. The new EN-7 must therefore be clear about the NNB designation status of the existing EN-6 sites.

**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**

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 component in the journey to 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 Great British Nuclear and the new nuclear technologies competitions and incentives that are likely to contribute to timely delivery.

We therefore agree that it is sensible for the new nuclear siting policy to take an unrestricted approach on timeframes. However, as set out in the response to Q1 and Q2 above, there is a need to ensure that the new EN-7 does not introduce uncertainties with respect to the status of the existing EN-6 sites.

**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**

The key policy changes proposed should support the timely delivery of new nuclear, however they are only part of the picture. However delivery will only be achieved if effective policy is in place alongside other measures to secure and incentivise delivery, for example GBN securing access to sites and Government support for new nuclear technologies, as well as appropriate funding mechanisms..

While the para. 3.2.11 commitment to ONR providing advice through the PINs process is welcomed, it is suggested that the new NPS includes a specific requirement for project promoters to secure and publish relevant ONR advice at the earliest possible stage in the site selection process.

Similarly it is suggested that Appraisals of Sustainability and Habitats Regulations Assessments are undertaken alongside early site screening, to ensure that biodiversity and other environmental considerations are taken into account at the start of the process.

To ensure robust assessment of sites against criteria, it is considered vital that the full range of criteria included in EN-6 are carried forward to EN-7, set out in EN-6 Part 2 Assessment Principles and Part 3: Impacts and general siting considerations.

By helping to ensure that unsuitable sites are screened out early, efficiencies would be gained and uncertainties for host communities reduced.

**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 particular public concerns that can arise in relation to nuclear development and including 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 EN-7 and alongside continued rigorous safety and regulatory assessments.

Given the complexities and particular characteristics of nuclear technologies whatever their scale, and in respect of 'first of a kind' developments, it seems entirely logical that all scales of nuclear power generation are subject to the same robust process of assessment, examination and determination under the Nationally Significant Infrastructure Project (NSIP) regime.

It is vital however that local communities and Councils continue to have an effective voice throughout the pre-application, application and examination process, and that their views on legitimate matters of concern can influence the nature of that development.

In view of the above, and with this caveat, the proposal for all scales of nuclear reactor including those that produce heat or synthetic fuels or hydrogen to fall within the NSIP regime, rather than be determined locally is supported.

**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?

This Council does not have evidence or technical information regarding fission reactors that only produce heat or synthetic fuels.

Through our participation in the Severn Edge initiative, we understand that various technology promoters are looking to manufacture hydrogen or synthetic fuels without the inefficiencies that would arise by powering via the Grid. Given that the designated EN-6 site at Oldbury, and the decommissioning site at Berkeley are relatively close to gas lines (that might accept hydrogen) and the aviation fuel line from Avonmouth to Heathrow, there may be potential for co-locating new nuclear power generation and low carbon fuel manufacture.

Bringing all types of nuclear fission outputs into the same policy framework and determination system therefore seems sensible. This Council therefore supports

inclusion of reactors that produce heat or synthetic fuels in the nuclear NPS beyond 2025.

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

#### **Undecided**

The criteria as set out seem to cover potentially relevant issues.

To ensure robust assessment of sites against criteria, it is considered vital that the full range of criteria included in EN-6 are carried forward to EN-7, set out in EN-6 Part 2 Assessment Principles and Part 3: Impacts and general siting considerations.

However we question whether under nuclear safety and security, consideration should be given to proximity to wind turbines? This Council previously received informal advice from ONR that wind turbines in close proximity could be a hazard to nuclear reactors due to the possibility of blade throw. This Council does not have the expertise to answer this question, but in view of the increased prevalence and scale of wind turbines, wishes to raise this as a question.

As per our response to Question 9 below, we strongly suggest that consideration is given to 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?

# Agree, but with a queries

Subject to the query set out at question 7 above, regarding the potential hazards of blade throw from wind turbines, and the suggestion that pre-application assessment of the Table 1 criteria should be required, we agree that the criteria set out in EN-1 and EN-7 and wider guidance are appropriately identified.

As acknowledged in the EN-7 consultation document, some criteria may be less relevant for some sites and in effect screened out as not relevant. 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 global warming and the very long timescales for the operation and decommissioning of nuclear power plants 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 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

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

Please see the response to Q7 above, in respect of any limitations that need to be set in relation to proximity to wind farms.

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

#### **Undecided**

As the assessment of flood risk and any flood mitigation strategies and measures are all critical to determining the appropriateness of siting for NNB projects, we entirely agree that these factors must be assessed at the earliest possible stage in site selection and project planning.

We therefore suggest that the new 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 communities and host Councils.

We also reiterate our comment made at 8a above, in respect of the need for robust flood risk and flood protection assessment not only at site selection stage, and through Examination prior to consent, AND also the need to ensure that adaptation of mitigation measures is enabled should potential future unforeseen flood impacts be predicted/ arise.

#### 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

As set out in our response to Q7 above, we query whether hazard assessment should include reference to proximity to wind turbines (risk of blade throw).

9c - Proximity to Civil Aircraft Movements

No comment

9d - Nationally and internationally designated sites of ecological importance

The 9b 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 Oldbury, being adjacent to international and national designations on the Severn Estuary – where the bird (or other mobile) species relevant to these designations also use adjacent and nearby land for shelter and foraging etc.

As per our response to Question 10e below, the requirement for Biodiversity Net Gain should also be included.

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

As for the response to 9d above, it is recommended that the wording is reviewed to ensure that 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 EN-6 Oldbury site sits within the open flat iconic landscape associated with the Severn Estuary, which is itself subject to international and national biodiversity designations. The biodiversity, landscape and visual implications of cooling facilities are therefore key considerations in determining whether certain technologies will be acceptable in locations such as this. This may in turn have implications for site selection.

It is therefore strongly recommended that this criterion is qualified to require that not only are the functional requirements for cooling infrastructure considered, but also any strategic environmental implications of that infrastructure, such as landscape, biodiversity and/or visual. Early consideration of key constraints such as this will ensure that any strategic constraints can in principle be overcome at the earliest possible stage in the site selection 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

As set out in our response to Question 2 above, we are very concerned that the proposed EN-7 approach is not clear with respect to the future designation of the EN-6 sites, and strongly suggest that all sections of EN-7 are reviewed to ensure that clarity that:

 The EN-6 designated sites have already been assessed against alternative sites, and therefore unless there has been a material change of circumstance locally, it should be made clear that a new assessment under EN-7 is not required for the siting of new nuclear power generation proposals of any scale on these particular sites.

- Include a specific statement that the EN-6 sites remain formally designated as potentially suitable for deployment of new nuclear power stations (of all scales).
- Any other (non EN-6) sites coming forward should of course be subject to a requirement to assess 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 our responses to Questions 2 and 10 above, the 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.

To require alternatives at this stage would be likely to result in further delay to the urgent delivery of low carbon energy. It is understood that Great British Nuclear is currently considering siting for SMRs, and they have stated that all EN-6 sites will be required. It would therefore be perverse to introduce an unnecessary additional hurdle at this stage.

This Council is supportive of assessment of alternatives for new sites coming forward.

### 10b: Radioactive waste management

While it is proposed that EN-7 will follow the approach taken in the already designated EN-6, this will require review in the light of the more recent changes identified in para. 4.4.9 of the DESNZ consultation document. Public safety must be paramount in considering any changes with respect to nuclear related development, including in respect of radioactive waste.

Retention of radioactive waste on site at new nuclear power stations should be minimised. Community Benefits should be provided for host communities that host radioactive waste on behalf of the nation.

#### **10c:** Impacts of multiple reactors

It is agreed that 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 EN-7 is carefully checked to ensure that it is relevant to all scales of development.

We again stress the importance of clarity in EN-7 in respect of the designated EN-6 sites. To provide certainty and ensure a streamlined process, it is important that EN-7 includes specific wording confirming that EN-6 sites remain designated as being potentially suitable for new nuclear development of all scales, and including for single or multiple reactors and all scales of nuclear power plant.

10d: Ownership of sites

No comment

10e: Biodiversity Net Gain

It is important that EN-7 should include specific reference to the requirement to deliver Biodiversity Net Gain as a part of all new nuclear developments. It would be helpful if 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**

- We welcome 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.
- We have concerns about the uncertainty contained in Para 5.2.3 last sentence: 'The
  government believes that the sites designated in EN-6 retain inherent positive
  attributes that will make them suitable for consideration for further development'.
  We question what this sentence means? It would seem to bring uncertainty to the
  previously established designation of EN-6 sites as being potentially suitable for
  new nuclear development.

As set out above, both for host Councils and communities, as well as for certainty in delivering the low carbon energy urgently needed by the country, we strongly suggest that unless there has been a material change in circumstance at any of the EN-6 sites, they have already demonstrated their in-principle suitability for new nuclear development. They should therefore be explicitly carried forward into EN-7.

 It is unfortunate that parallel processes of DCO consent and other permitting will be retained. This is complex and onerous for both host communities and Councils. However it is understood that the rationalisation of the various consenting regimes is probably beyond the scope of a new EN-7.

**Question 12:** What, if any, help from government or GBN1 would you expect to see to support developers with site identification?

This Council does not have sufficient information on the role or current activities of Great British Nuclear (GBN) to be able to answer this question.

We hear that GBN is looking at siting for new nuclear developments, and potentially matching with technologies.

We strongly urge DESNZ to require that GBN to engage with host Councils and communities regarding siting for NNB at the earliest possible opportunity, as Councils and communities have much to bring to the siting process, including not only local knowledge but also local priorities and policies.

**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?

# **Community Benefits**

Communities hosting new nuclear developments do so on behalf of the nation. It is only right therefore that, as is increasingly accepted for other developments including hosting radioactive waste facilities and solar and wind farms, EN-7 should require the delivery of community benefits to offset the burden and/or disturbance of hosting nuclear facilities on behalf of the nation.

# Reusing brownfield land and existing infrastructure

In line with the recently published Civil Nuclear Roadmap, it is strongly suggested that EN-7 includes a requirement for developers promoting new nuclear development on at or adjacent to existing Nuclear Decommissioning Authority sites to maximise the use of existing brownfield land, buildings and/infrastructure. This would promote sustainability, minimisation of impact and could potentially also benefit the public purse.

**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:

This is a delegated officer response following consultation with the Leader and Co-Leader of South Gloucestershire Council.

If there are any questions regarding the above, please contact the author as below, or alternatively Jon Severs Head of Regeneration jon.severs@southglos.gov.uk

# Contact information

Gillian Ellis-King Strategic Projects Manager 01454 863724 www.southglos.gov.uk