



FREEPOST Norwich to Tilbury
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Our ref: N to T Response
Date: 15 August 2023
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Dear Sir/Madam,

National Grid Electricity Transmission – Norwich to Tilbury – Non-Statutory Public Consultation

Thank you for the opportunity to comment on the Norwich to Tilbury non-statutory public consultation, launched 27 June 2023.

East Suffolk Council (ESC) is a neighbouring authority to the proposed 400kV electricity reinforcement between Norwich to Bramford, and Bramford to Tilbury. The Council's comments on the project and consultation material have been provided below.

ESC recognises the need for the reinforcement project. The Council also supports coordinated offshore solutions where they would not result in significant additional onshore infrastructure in East Suffolk. The offshore alternative presented in this consultation would entail substantial additional onshore infrastructure in the district with associated impacts on communities and the environment. It is vital that government and scheme promoters/applicants consider brownfield sites for onshore infrastructure, rather than build new infrastructure in rural areas impacting on designations such as SSSIs. As such, unless an alternative offshore solution was identified which did not necessitate substantial onshore infrastructure in East Suffolk, based on the current information, ESC cannot support the offshore alternative to the current project proposals.

Draft Alignment

One of the focuses of this consultation is to seek views on the preferred draft alignment which shows potential positions for overhead line and associated pylons, underground cables, cable sealing end compounds and connection substations.

As ESC is a neighbouring authority and not one within the Primary Consultation Zone or Secondary Consultation Zone, ESC defers to host local authorities and County Councils to provide detailed comments on site specific matters within their geographical jurisdictions.

Undergrounding

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ESC considers further assessment of undergrounding should be undertaken, specifically, further consideration and assessment of the potential benefits of undergrounding in the Waveney Valley.

No undergrounding is currently proposed in the Waveney Valley, which is a very sensitive and valued landscape. Undergrounding is proposed for certain lengths through and around the Dedham Vale Area of Outstanding Natural Beauty (AONB), which is welcomed but it is important that further consideration is given to the undesignated highly valued landscapes.

The Design Development Report states feedback from the previous non-statutory consultation proposed undergrounding in the Waveney Valley instead of an overhead line, which has been discounted in this consultation.

5.5.44 National Grid's duties and obligations include balancing the need to be economic and efficient, which includes keeping costs down in the interests of the bill-paying consumers, with a duty to have regard to preserving amenity, which includes the natural environment, cultural heritage, landscape and visual quality. NPS EN-5 makes it clear that the government considers overhead lines to be appropriate and acceptable in most instances, although it recognises that there may be, at particularly sensitive locations, potential adverse landscape and visual impacts of an overhead line that make it unacceptable in planning terms. On the basis of assessment completed to date, National Grid do not consider routeing of an overhead line through this area presents to be incompatible with our duties and obligations and therefore an overhead line is proposed in this location.

Whilst ESC recognises the need undertake such a balancing exercise the conclusion is not supported. Paragraph 2.8.4 of currently adopted National Policy Statement EN-5 addresses undergrounding stating that *"wherever the nature or proposed route of an overhead line proposal makes it likely that its visual impact will be particularly significant, the applicant should have given appropriate consideration to the potential costs and benefits of other feasible means of connection or reinforcement, including underground and sub-sea cables where appropriate"*.

The 2023 draft EN-5; *"although it is the government's position that overhead lines should be the strong starting presumption for electricity networks developments in general, this presumption is reversed when proposed developments will cross part of a nationally designated landscape (i.e. National Park, Broads, or AONB). In these areas, and where harm to the landscape cannot feasibly be avoided by mitigation or re-routeing, the strong starting presumption will be that the developer should underground the relevant Section of the line. Note however that undergrounding will not be required where it is infeasible in engineering terms, or where the harm that it causes is not outweighed by its corresponding landscape and/or visual benefits"*.

ESC welcomes the proposals to underground sections in the Dedham Vale AONB in accordance with emerging policy, but requests that full consideration is given to the location and siting of overground structures like cable sealing end compounds immediately outside the AONB.

Structures adjacent the designated landscape may not be within the AONB itself, but still have a visual impact on the setting of the AONB. Further consideration should be given to extending the section of undergrounding to ensure that overground structures are sited as to minimise visual impacts on the designated landscape and its setting.

National Grid Electricity System Operator (NGESO) - East Anglia Study

NGESO has committed to carrying out an independent study to take a fresh look at the drivers for the network reinforcements in East Anglia, alongside the various considerations that need to be taken into account; considering the costs to consumers, deliverability and operability, impact on the environment, and impact on local communities. This review will take place following the publication of the outcomes of the Offshore Coordination Support Scheme (OCSS), a workstream of the Offshore Transmission Network Review (OTNR).

As part of the OTNR and OCSS promoters of projects off the coast of East Anglia are considering alternative connection locations. This review may therefore change the underlying needs case for some planned onshore transmission reinforcements in East Anglia. This analysis will identify if changes in connections alter the requirements for any planned reinforcement projects including Norwich to Tilbury, identify other options which could address these changed requirements including consideration of offshore routes, assess the merits of each option, and benchmark the costs of options against other projects.

ESC welcomes that this consultation clearly states the recommendations and outcomes of the NGESO study will be carefully considered and a thorough backcheck carried out with this in mind.

Offshore Alternatives

The Strategic Options Backcheck and Review provides an overview and description of the options NGET has identified and subsequently evaluated. One offshore option (Offshore 1 Norwich Main to Tilbury) is presented. It identifies the shortfalls of this option as failing to provide the flexibility of the onshore connection options in meeting geographical supply with transmission and notes a fully like-for-like alternative would require significant additional infrastructure onshore.

EX.61 notes the original offshore option provided 4000MW capacity, but this option no longer provides the required capacity of a minimum of 8,000MW since the updated contracted generation described in the needs case section of this report has increased.

EX.62 The offshore alternative to match the capacity of AC onshore options is a Norwich Main to Tilbury 6000 MW option, which, when combined with Sea Link, would meet the requirements of delivering 8,000MW across EC5 and LE1 by 2050.

EX.63 Firstly, the 6,000MW Offshore 1 option would only facilitate the contracted Essex Cost Generation Group including Tarchon Interconnector, North Falls and Five Estuary offshore wind generation, with an offshore connection into the link. This would require significant additional infrastructure. The offshore HVDC platform and offshore AC platform needed to accommodate the required HVDC converter station and AC substation, would have additional capital costs of greater than £500m.

EX.64 Secondly, option Offshore 1 would not provide the flexibility of onshore connection options which facilitate flows both to the West and East of the transmission system for different system faults. Offshore 1 only provides flows to the East of London, whereas energy demand is distributed throughout England so this option would not be as effective for all system conditions compared with the combination of an EAN and EAS option. EX.65 To achieve a fully like-for-like alternative with the AC North and South of East Anglia circuit options, with the additional flexibility of connecting into Bramford or substations to the west, the HVDC solution would need to be of a multi-terminal design, with 3 additional 2000 MW converters located at Bramford and cabling 50km from a DC bussing point offshore. This would significantly increase the costs and the potential environmental effects.

14.4.6 Should this circuit at full 6000 MW capacity made multiterminal to provide the same system flexibility as the AC circuit options. There would be a need for an additional three sets of HVDC convertor stations and three sets of 50km HVDC cable to connect to Bramford, to make multi-terminal HVDC links.

ESC continues to promote the need for a coordinated offshore solution to deliver the renewable and low carbon generation and associated transmission infrastructure needed to meet the Net Zero and decarbonisation targets. This is essential to minimise the extent and scale of the impacts of onshore infrastructure, particularly in East Suffolk. This remains our position. While ESC fully supports offshore solutions, ESC would not support an alternative offshore solution as described above which would entail substantial additional onshore infrastructure. In order to mitigate the impact on communities and the environment, it is vital that Government and Scheme Promoters/Applicants consider brownfield sites for onshore infrastructure, rather than build new infrastructure in rural areas impacting on designations such as SSSIs.

ESC would therefore not be supportive of an alternative solution which would cause significant additional onshore infrastructure within East Suffolk, such as the alternative offshore solution presented above.

Cumulative Impacts

ESC has previously raised concern about the cumulative impact on communities and the environment of the Norwich to Tilbury project in combination with other energy projects. The full

cumulative effects of the Norwich to Tilbury project in combination with other consented and planned NSIPs must be fully and robustly assessed. All opportunities to minimise the adverse impacts should be explored and where appropriate, sufficient mitigation and compensation provided. The applicant should also take every opportunity to secure the maximisation of any benefits, including full and thorough consideration of a community benefits scheme.

Community Benefits

ESC acknowledges that upgrading the existing electricity transmission network will play an important part in enabling the development of renewable and low carbon energy generation and contributing to the government's ambition to reach Net Zero. However, consideration must be given to the potential impacts this proposal, and other proposed projects, may have on the landscape, natural environment, and local communities set to host such development.

Given the scale and rate of infrastructure delivery necessary in the coming years to meet Net Zero ambitions, ESC considers it is important for projects to provide tangible and direct community benefits to communities hosting national infrastructure.

The benefits of low carbon energy production and distribution are felt nationally, but the potential adverse environmental, social, and cumulative effects are felt at a local scale, by host and neighbouring communities. ESC supports thorough consideration of any potential community benefits scheme as secondary mitigation, in addition to primary mitigation.

ESC encourages National Grid to maximise the potential benefits of the project by seeking to provide a community benefit scheme to deliver benefits for affected communities along the proposed route.

Rationalisation

ESC supports and requests the full exploration of additional benefits that could be achieved through the rationalisation of the existing 132kV network as part of the project. This could enable potential improvements in terms of connections of other projects to the electricity network, create landscape improvements through the removal of existing overhead lines, and reduce the cumulative visual impact of energy infrastructure. ESC would support the removal of existing lines which could be replaced by overhead lines provided in this project.

If you would like to discuss any of the comments made in this response further, please do not hesitate to contact ESC using the above contact details.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Philip Ridley', with a long horizontal flourish underneath.

Philip Ridley BSc (Hons) MRTPI
Head of Planning and Coastal Management
East Suffolk Council