

Necton
Norfolk

20th October 2021

The Rt. Hon. Kwasi Kwarteng
Secretary of State
Dept. for Business, Energy and Industrial Strategy

Dear Mr. Kwarteng,

Norfolk Boreas: submission on behalf of the Norfolk Parish Movement for an OTN

I am writing to you today in response to your letter of 22nd September 2021 regarding the Norfolk Boreas consultation.

Necton Parish Council would like to register their concerns about the cumulative visual impact assessment and associated mitigation for the Boreas and Vanguard project substations proposed to be sited beside Necton.

In the deadline 18 submission from the applicant: document 6.6 Schedule of mitigation (REP18-017) reference: 15.4, DCO cross reference: 22.7.1 there is a single reference to the mitigation proposals for the Necton substations. This states that the effects of mitigation is to '*minimise visual and land impacts at the Onshore project substation and surrounding area*'. The means of implementation is specified and only shown as tree planting in the DCO Schedule 1, Part 3, Requirement 18, Provision of Landscaping, Requirement 19, and DCO Schedule 1, Part 3, Requirement 24 EMP. The mitigation is derived from the environmental impact assessment which can be found in document APP-242: Environmental Statement - Chapter 29 Landscape and Visual Impact Assessment, volume 1. Only positions along the A47 and in Ivy Todd (Lodge Lane) are identified as places that could have the potential for a significant cumulative effect from the Necton substations; see Table 29.16 of APP-242 (within paragraph 201).

The Applicant has also submitted maps in APP-488 and APP-489 showing the Scenario 1 zone of theoretical visibility for the Boreas / Vanguard and National Grid substations respectively. APP-488 is a drawing (no PB5640-006-029-005) that shows where there will be high theoretical visibility of the project substations, marked up as grey areas on the map. There is a dotted line at 3km from the substations. Within the dotted line, at least 60% of the area is designated high theoretical visibility. The villages of Holme Hale, Bradenham and Fransham are also coloured grey on the map

This does not support the applicant's assertion that there will only be local high visibility of the project substations. On the map the areas of high theoretical visibility continue outwards to the edge of the drawing and, by inference, beyond.

The essence of the success of the Judicial Review was based on the failure by the Applicant to present any cumulative impact data in the Vanguard DCO and for the Secretary of State not to query this lack of consideration of the cumulative impact of the Vanguard and Boreas projects in juxtaposition. Vanguard failed to include Boreas for the purpose of cumulative

impact assessment as these projects were deliberately submitted as separate applications when they should have been submitted as a whole, since they share much of the infrastructure onshore. It would be a further mistake if this opportunity to properly consider the cumulative impact of Boreas and Vanguard is not taken. The Boreas DCO was submitted before the result of the Judicial Review and there has been no resulting upgrade to the proposed mitigation. Below are the reasons why we believe the currently proposed cumulative impact assessment and mitigation to be flawed.

1. Visualisation Inadequacies

The visualisations underpinning the cumulative visual impact assessments for both the Vanguard and Boreas projects were done using flawed data, see below. The environmental impact methodology can be found in APP-219. The methodology is sound but the data used has been challenged. There are well-known, common problems with the accuracy of ground contour data that were pointed out, using diagrams, in the DCO examination process through the representation of Colin King in REP8-35. This representation was based on the accurate knowledge of the ground by a person who has lived in Ivy Todd for the whole of his life. He noticed that ground level was assumed by the applicant to be near the top of the existing mature trees. His representation states:

“The applicant has revised their Land form Cross-Section, Now in scale. I have added mitigating trees, and view line where appropriate. It again demonstrates the buildings are over 3/4 in view at viewpoint 3, and virtually 1/2 in view at viewpoint 7. This is still very different to the applicants visualisations, which show the buildings virtually totally concealed and totally concealed respectively.”

The applicant has ignored the concerns raised in REP8-35. Since no argument has been made by the Applicant to support the accuracy of the ground topography used in the light of the flaw pointed out in REP8-35, this calls into question the accuracy of the whole cumulative visual impact assessment provided to the examination. Therefore, the planning balance conclusion of environmental harm versus benefit is not safe.

2. Inadequate Mitigation

It is acknowledged by Vattenfall in their cumulative impact assessment, reference APP- 242, that there is a significant visual impact in the Necton area. The mitigation proposed is to plant trees in a narrow line at strategic points. According to the Onshore Cumulative Environmental Impact Assessment, chapter 33, in APP 246, this mitigation is only expected to be effective after 20 years has elapsed. Necton Parish Council believe that the ground contour data used for this assessment is sufficiently flawed (see point 1) that the proposed mitigation will never be adequate. But even if the Applicant’s data is accepted, the mitigation proposed will be inadequate for two thirds of the life of the project.

The Strategic Plan for mitigation can be found in Figure 29.11 and shows the planting proposed for Scenario 1. We believe the proposal is minimal and not fit for purpose. The width of tree planting is narrow in all directions except that of Great Wood, which will provide its own screening in that direction. There are significant gaps in the planting, for

example virtually nothing in the direction of Black Drift, a Road Used as a Public Path (RUPP) situated in the high theoretical visibility part of the map APP-488 above.

A number of ways to provide more effective mitigation were proposed during the examination of the Boreas project but these were not costed or considered seriously by the Applicant. The substation buildings are huge and their proposed position is on top of the highest plateau in the area. Therefore, the visual impact will be significant to the many people living in the area and travelling through it. Similar mitigation to that recommended by Necton Parish Council of 6m high bunding / earth banks covered in trees of a suitable height, has already been implemented for a number of other infrastructure projects in Norfolk. These have shown good success. We believe it is both possible and reasonable to put in place significantly better mitigation than that currently specified in the Boreas DCO.

3. Pathfinder project for the OTN

The Holistic Network Design (HND) for the Offshore Transmission Network (OTN) is scheduled to be completed in January 2022. This approach to connection of offshore windfarms in to the National Grid will be significantly cheaper and cause far less damage to the environment than the radial connection in the Boreas and Vanguard DCOs. The OTN is likely to be available on a similar timescale to the Boreas / Vanguard project since the HND is scheduled to be completed in January 2022. Only preliminary details and the Rochdale envelope approach to design has been used for the Boreas DCO and detailed design would follow approval. We respectfully ask that the Secretary of State ensure that the Environmental Best Option of connection through an OTN is selected for the Boreas DCO through acceleration of the regulation changes and delay to the Boreas DCO approval unless the Applicant selects the pathfinder route.

The National Grid electrical connection detail is well known so a Boreas design using the OTN could be done concurrently with that of the OTN itself causing little if any delay to the UK implementation of green energy to be provided by the Boreas project.

The "design flexibility" inherent in the Rochdale Envelope enabled Vattenfall to proceed with the initial application for Vanguard before the decision on HVAC or HVDC was made and indeed to split the one project into two separate applications, which they claim are not interdependent when they clearly are as they share the same substation location and cabling routes. The change to HVDC has materially affected the visual harm at Necton and the surrounding area due to the immense size of the DC converter halls compared to the HVAC Dudgeon installation, but the mitigation has not been suitably upgraded and alternative nearby sites at lower altitude not properly considered.

Surely the same "design flexibility" principle should enable the applicant to reconsider the planned radial cable routes across great swathes of the Norfolk countryside concentrating on Necton along with other existing Offshore Windfarm infrastructure. The alternative OTN approach is based on available technology, supported by BEIS and would provide cost savings as well as less damage to the environment of Norfolk generally and the visual impact in Necton in particular. We would like the DCO to switch from radial connection in to the National grid to the use of the future OTN as part of the flexibility available through the Rochdale envelope.