

**Norfolk Vanguard Offshore Wind Farm**

# **Applicant Response to Breckland Council Local Impact Report**

Applicant: Norfolk Vanguard Limited  
Document Reference: ExA; LIR; 10.D2.4C

Date: January 2019  
Author: Royal HaskoningDHV

*Photo: Kentish Flats Offshore Wind Farm*



Date	Issue No.	Remarks / Reason for Issue	Author	Checked	Approved
25/01/2019	00	First draft for Internal review	JA	JA	GK
25/01/2019	01D	First draft for Norfolk Vanguard Limited review	JA	JA	GK
25/01/2019	02D	Second draft for legal review	JA	JA	GK
29/01/2019	03D	Third draft for Norfolk Vanguard Limited review	JA	JA	GK
29/01/2019	04D	Fourth draft for Deadline 2 submission	JA	JA	GK

## Table of Contents

<b>1</b>	<b>Introduction .....</b>	<b>1</b>
<b>1.1</b>	<b>Breckland Council Local Impact Report.....</b>	<b>1</b>

## Glossary

DCO	Development Consent Order
ES	Environmental Statement
HVAC	High Voltage Alternating Current
HVDC	High Voltage Direct Current
LIR	Local Impact Report
LVIA	Landscape and Visual Impact Assessment
NSIP	Nationally Significant Infrastructure Project
OLEMS	Outline Landscape and Ecological Management Strategy
SoCG	Statement of Common Ground

## 1 INTRODUCTION

1. In accordance with the Rule 8 letter of 19 December 2018, Breckland Council has submitted a Local Impact Report (LIR) at Deadline 1 in relation to the application for a Development Consent Order (DCO) for Norfolk Vanguard Offshore Wind Farm (the Project) as submitted by Norfolk Vanguard Limited (the Applicant). This provides a summary of Breckland Council’s position on various matters, with particular reference to landscape and visual impacts.

### 1.1 Breckland Council Local Impact Report

#### 1.1.1 Summary Response

2. The Applicant has responded below to matters raised by Breckland Council. A Statement of Common Ground (SoCG) (Rep1-SOCG-2.1) has been produced between Breckland Council and Norfolk Vanguard Limited, which provides a summary of matters agreed and those under further discussion, although detailed input from Breckland Council is currently outstanding. The Applicant will continue to engage with Breckland Council on points still under discussion in order to reach agreement in due course. Where further progress is made between the Applicant and Breckland Council, an updated version of the SoCG will be submitted at an appropriate deadline. The final position of the SoCG will be submitted on or before Deadline 8 on 30 May 2019.

#### 1.1.2 Full Response

Breckland Council Local Impact Report	Applicant’s Response
<p>A Local Impact Report (LIR) is defined under Section 60(3) of the Planning Act 2008 as “a report in writing giving details of the likely impact of the proposed development on a local authority area (or any part of that area)”. The content of the LIR is a matter for the local authority concerned as long as it falls within this statutory definition. This provides a means for Local Planning Authorities to present knowledge and evidence of local issues in a full and robust report to the Examining Authority. This report is based on the existing local knowledge of Council Officers and Elected Members.</p> <p>This is a Local Impact Report relating to the submitted Development Consent Order application for the Norfolk Vanguard Offshore Wind farm and Onshore Supporting Infrastructure. It has been produced in line with Version 2 of the Local Impact Report Guidance (the Advice Note) produced by the Planning Inspectorate dated April 2012. It specifically considers the likely impacts of the proposed development on the district of Breckland.</p>	<p>Noted.</p>

Breckland Council Local Impact Report	Applicant's Response
<p>Breckland Council is a statutory consultee for this Nationally Significant Infrastructure Project (NSIP) as it is one of the Local Authorities within whose administrative area many of the key works will take place. All renewable developments over 50MW capacity are currently considered by the Secretary of State for Energy under the Planning Act 2008 with the council acting as a statutory consultee.</p> <p>The national guidance note for LIRs states that, when the Examining Authority decides to accept an application, it will invite relevant local authorities to submit a LIR. It is the responsibility of local authorities to prioritise preparation of the LIR irrespective of whether the local authority considers the development would have a positive or negative impact on their area. A number of topics are suggested which may be of assistance in the report. The relevant ones are included in this report, reinforced by local knowledge and evidence for the benefit of the Examining Authority.</p> <p>The LIR may also comment on DCO obligations and their impact on the local authority's area. The advice note is however clear that in producing an LIR the local authority is not required to carry out its own consultation with the community. It is understood that parish councils, organisations (such as the Necton Substation Action Group) and members of the public are able to make representations directly to the Planning Inspectorate as "interested parties" so that their comments about the scheme will be considered by the Examining Authority. As such the views of local interest groups have not been sought specifically for the purposes of this report, though officers will be meeting with residents shortly to discuss the contents.</p> <p>This report has been written to incorporate the relevant topics and guidance in the Advice Note specifically arising from the Development Consent Order application. This has been prepared in close collaboration with Senior Officers of the Department of Place and leading Councillors with a particular interest in development and regeneration.</p>	
<p><b>Breckland District</b></p> <p>Spanning over 500 square miles Breckland is a geographically large rural District located in the heart of Norfolk. The District is characterised by a dispersed settlement pattern of market towns, villages and hamlets. There are five market towns, a network of local service centres, and numerous small villages and hamlets. Approximately half the current population live in one of the five market towns of Attleborough, Dereham, Swaffham,</p>	<p>Noted.</p>

Breckland Council Local Impact Report	Applicant's Response
<p>Thetford and Watton with the remaining population dispersed across the District. The area is represented through 112 town and parish councils and the District Council.</p> <p>Two trunk road routes run across the District and Breckland's strategic position is emphasised by good road communications offered by the A47 and A11. The A47 links Dereham and Swaffham with Norwich in the east and King's Lynn in the west and further afield to Peterborough and the A1(M), while the A11 links Attleborough and Thetford with Norwich and the Norwich Research Park to the north-east and Newmarket, Cambridge and the M11 in the south-west. The remaining parts of Breckland are served by a network of non-trunk "A" category, secondary and minor roads.</p> <p><b>Necton Village</b></p> <p>The key onshore work associated with this project would be developed in Necton. Necton is located between Dereham and Swaffham and has access from the A47. It is identified in the emerging Local Plan as a Local Service Centre. The village has a regular bus service and is located on the X1 route between Peterborough and Lowestoft. There are approximately 39 businesses within the parish. The emerging Local Plan housing distribution sets out that the village will provide an additional 301 dwellings during the plan period until 2036.</p>	
<p><b>Proposal</b></p> <p>The key proposed element of the scheme affecting Breckland involves the creation of onshore grid connection infrastructure to support a new offshore wind farm development in the North Sea.</p> <p>This involves the implementation of a new buried cable route, with a 20 metre easement, through the district from the direction of Happisburgh into the grid connection point at Necton. This has been designed to accommodate both the Vanguard and Boreas projects for approval under this current application for a Development Consent Order. It is estimated that the cabling works will take around 24 months.</p> <p>Furthermore, the existing National Grid substation at Necton would require a considerable extension. This would increase (by more than double) the current floor area of 21,000 square metres to 51,000 square metres with the structure above reaching a maximum height of 15 metres. Again this part of the project would take 24 months, possibly extending to 30 months, for the construction period.</p>	<p>Noted. The Applicant refers to Environmental Statement (ES) Chapter 5 Project Description (document reference 6.1.5).</p>

Breckland Council Local Impact Report	Applicant's Response
<p>In addition a new onshore substation to house the HVDC convertor station is required and this would cover a land area of some 75,000 square metres. The maximum height for this structure would be higher than the adjacent aforementioned existing development and extension at 19 metres. The associated lightening protection masts would tower above this at 25 metres. The timeframe for this development would be similar to that of the extension works.</p> <p>The overhead line corner tower north-east of the existing substation would be removed and replaced with two new towers at a maximum height of 55 metres, in order to upgrade the power lines. This would be sufficient to meet the requirements of both the Vanguard and Boreas schemes and the timeframe of 24-30 months is again applicable.</p>	
<p><b>National and Local Planning Policy Context</b></p> <p>The revised National Planning Policy Framework (NPPF) 2018 includes a dedicated section on meeting the challenge of climate change because addressing this is one of the core land use planning principles. There is a responsibility to provide opportunities for renewable technologies. Central Government places a requirement on the planning system support renewable energy and associated infrastructure. Green development is crucial to the future of the nation and planners must help increase the supply of renewable energy. It is necessary to provide a positive strategy for energy from these sources, whilst ensuring that adverse impacts are addressed satisfactorily (including cumulative landscape and visual impacts). Applications should be approved if impacts are (or can be made) acceptable.</p> <p>This identifies the crux of the matter in this case from the point of view of the Local Planning Authority. It cannot be disputed that Norfolk should accommodate the creation of wind farms in principle and the benefits of non-renewable energy are supported for Breckland. However, the District enjoys a special and unique landscape character and this development proposal would have a significant visual impact on the countryside. Local Planning Authorities should ensure that protecting the local environment is properly considered alongside the broader issues of protecting the global environment. Also relevant is therefore the section in the NPPF about conserving and enhancing the natural environment. In line with this part of the framework, the Local Planning Authority seeks to protect and enhance the valued landscapes of the</p>	<p>The Applicant refers to the SoCG between Norfolk Vanguard Limited and Breckland Council (Rep1-SOCG-2.1) submitted at Deadline 1, where the appropriate plans and policies relevant to landscape and visual impacts are identified as having been appropriately considered based on feedback received during Section 42 consultation.</p> <p>The national and local planning context is also presented in more detail within ES Chapter 3 Policy and Legislative Context (document reference 6.1.3). ES Chapter 2 Need for the Project (document reference 6.1.2) sets out renewables and government targets relevant for the project.</p> <p>Chapter 4 Site Selection and Assessment of Alternatives of the ES (along with Appendices 4.1 to 4.9 of the ES) (document reference 6.1.4, and 6.2.4.1-6.2.4.9) and the report titled Strategic Approach to Selecting a Grid Connection Point (document Pre-ExA; OCP Report; 9.2) provide detailed information on both the approach to identifying a grid connection point and the process for identifying, at the identified connection point, a preferred location for the onshore project substation and national grid extension.</p> <p>The Applicant has been mindful of the landscape character of Breckland District throughout the site selection exercise. The Horlock Rules (National Grid's Guidelines on Substation Siting and Design) were considered as part of the project design, and for landscape and visual impacts specifically through avoiding proximity to any landscape designations, taking advantage of screening by land form and existing vegetation, and the use of site layout and levels to reduce impacts on surrounding areas.</p>



Breckland Council Local Impact Report	Applicant's Response
<p>District and recognises the intrinsic character and beauty of the countryside. The countryside includes not just designated landscapes but also the wider countryside.</p> <p>Although the NPPF was updated last year in 2018, the same principles have been applied in the relevant policies of the Breckland Core Strategy and Development Control Policies Document published in 2012. This will remain applicable until the currently emerging Local Plan is adopted by the council later in 2019.</p> <p>For instance, in terms of the principle of development, Local Policy CP12 for energy states that the Local Authority encourages and supports the provision of renewable technologies and commercial scale renewable energy generation developments will be supported throughout the District. Large scale developments of this type will be subject to a comprehensive environmental assessment which will be based on the individual and unique circumstances of the case. When considering such assessments regard will be given to the wider environmental benefits of providing energy from renewable sources as well as effects on amenities and the local environment.</p> <p>Furthermore, Policy CP11 for the protection and enhancement of the landscape states that the landscape of the District will be protected for the sake of its own intrinsic beauty and its benefit to the rural character. Development should have particular regard to maintaining the aesthetic and biodiversity qualities of natural features within the landscape including a consideration of individual or groups of trees, hedges and woodland.</p> <p>High protection will be given to the landscape, reflecting its role as a regionally significant green infrastructure asset. The Council expects all the development within the District to be of the highest design quality in terms of both architecture and landscape. It should have regard to good practice in urban design and fully consider the context within which it sits. It should embrace opportunities to enhance the character and appearance of an area and contribute to create a sense of local distinctiveness.</p>	<p>The onshore project substation benefits from existing hedgerows and woodland blocks within the local area (Great Wood, Necton Wood), which provide a level of mitigation of landscape and visual effects from the outset. ES Chapter 29 Landscape and Visual Impact Assessment (document reference 6.1.29) and the Outline Landscape and Ecological Mitigation Strategy (document reference 8.7) set out proposed planting mitigation for the project, secured through DCO Requirement 18 and 19. to ensure further robust screening.</p> <p>With regards to good design, this is an ongoing process and a further level of design will be undertaken through preparation of the detailed plans for the construction of the project and implementation of associated landscape works. These will cover issues such as the colour selection for structural components and plant species and mixes for the structural landscaping. These decisions will be captured in a Landscaping Management Scheme secured through DCO Requirements 18 and 19.</p>
<p>As this is classed as a Nationally Significant Infrastructure Project (NSIP) under the Planning Act 2008 this Development Consent Order will ultimately be determined by the Secretary of State for Business, Energy and Industrial Strategy. Technical consultees have the duty of responding to consultations to advise on the likely material</p>	<p>Noted. The Applicant has engaged with Norfolk County Council through the SoCG (Rep1-SOCG-15.1) to agree on matters related to traffic and transport, water resources and flood risk and the health impact assessment.</p>

Breckland Council Local Impact Report	Applicant's Response
<p>planning implications of this project based on local knowledge and experience.</p> <p>In terms of the key impacts of the development there is a two-tiered level of governance for Breckland at the County and District levels. Norfolk County Council has a statutory role to assess matters relating to the highway network, minerals and waste, flood risk and public health. The principle of the development is supported in line with the national and local agenda for renewable energy technologies and so the main responsibility of the District Council is therefore to judge the merits of the proposal with particular reference to the visual effect of the proposal on the special landscape character of the area.</p>	
<p><b>HDVC Technology</b></p> <p>Vattenfall is proposing to deploy High Voltage Direct Current (HVDC) cable technology to connect the 1.8GW Norfolk Vanguard, and the 1.8GW Norfolk Boreas associated project, to the National Grid. This approach has been decided upon by the company strategists for two reasons in particular. The first is because Vattenfall has calculated that the HVDC solution would be cost competitive with the other option of High Voltage Alternating Current (HVAC) technology as a consequence of lower losses of transmitted electricity. There would be a lower number of cables connecting the wind farms to the grid and innovative techniques would generate smaller costs on substations and associated equipment. The second is because the company considers that, when compared to HVAC connecting large wind farms to national grids from lengthy distances, HDVC will have a reduced impact on the environment and local communities where onshore infrastructure is located.</p> <p>Indeed, in this particular case, the preferred HVDC approach has removed the need for a booster relay station and the cable corridor width has been reduced from 100 metres to 45 metres relative to the HVAC alternative. This narrowing is to be welcomed. However, the Local Planning Authority would point out that the significant negative impact arising out of this move is that the grid connection facility at Necton will now be 4 metres higher at 19 metres. It is inevitable that this would be noticeably more visible by the local resident and business communities and by the many users and visitors along the A47 when they take in the environment of Necton and the immediate surroundings. It is understood that Vattenfall wants to be a leader in maturing HVDC technology to connect its large-scale, far offshore wind farms – like Norfolk Vanguard and Norfolk Boreas – to national grids and</p>	<p>The site selection exercise undertaken by the Applicant was based on the worst-case scenario. The site selection work for the onshore project substation was progressed on the worst-case height of 19m. As such, the preferred site was identified on its capacity to accommodate the HVDC (19m high) solution. Further detail of the site selection exercise is presented within ES Chapter 4 Site Selection and Assessment of Alternatives (along with Appendices 4.1 to 4.9 of the ES) (document 6.1.4, and 6.2.4.1-6.2.4.9). Committing to a High Voltage Direct Current (HVDC) solution also removes the need for additional onshore infrastructure (cable relay station) in North Norfolk and reduces the potential environmental impact associated with the cable route by narrowing the cable corridor from 100m to 45m.</p>

Breckland Council Local Impact Report	Applicant's Response
<p>believe that this form of technology supply is kinder to the environment and local people but there would be an adverse obvious consequence for Necton arising from Vattenfall promoting HVDC manufacturing in this instance.</p>	
<p><b>Community Involvement</b></p> <p>The NPPF explains that all communities have a responsibility to help increase the use and supply of green energy, but this does not mean that the need for renewable energy automatically overrides environmental protections and the planning concerns of local communities. As with other types of development it is important that the planning concerns of local communities are properly heard in matters that directly affect them.</p> <p>If the Secretary of State is considering granting development consent then in making that decision he should be satisfied that the planning impacts identified by local communities have been fully addressed and the proposal has their backing. It is the planning judgement of the Local Planning Authority in this case does not have the backing of the affected local community. A key reason is due to concerns over the cumulative and visual impacts that would arise from the scheme.</p>	<p>A detailed landscape and visual impact assessment has been undertaken and is presented in ES Chapter 29 Landscape and Visual Impact Assessment (LVIA) (document reference 6.1.29). The findings of the LVIA are that significant visual impacts (taking into account Norfolk Vanguard onshore project substation, the National Grid extension works and Norfolk Boreas) will be limited to:</p> <ul style="list-style-type: none"> <li>• Walkers on Lodge Lane to the immediate south of the site,</li> <li>• Road-users on a very localised section of Ivy Todd Road to the south-west; and</li> <li>• A section of the A47 to the north.</li> </ul> <p>These effects would all occur within approximately 1.2km of the onshore project substation, making them localised. There would be no significant effects on the views of residents at Ivy Todd and Necton.</p> <p>Mitigation planting is proposed to screen these views, which is set out on Figures 29.9a, 29.9b, 29.10b and 29.10c of ES Chapter 29 Landscape and Visual Impact. These significant visual impacts will reduce to not significant as the planting establishes and matures. The mitigation proposals are captured in the Outline Landscape and Ecological Management Strategy (OLEMS) (document reference 8.7) and secured through DCO Requirement 18 and 19.</p> <p>The Applicant proposes to explore how living and working in relative proximity to elements of the UK's new generation of clean, green electricity infrastructure may enable appropriate local investment. It is in this context that the Applicant is seeking to facilitate dialogue which enables open and participative visioning of local futures outside of the DCO process.</p> <p>To date preliminary discussions with the Chair (by telephone, mid-December 2018) and Vice-chair (in person, 16<sup>th</sup> November, 2018) of Necton Parish Council have taken place, outlining proposals for exploratory dialogue on local interests and needs. Representatives of Breckland Council and Norfolk County Council have also been approached in relation to forming an advisory panel who might guide a dialogue process, ensuring it is relevant and fit for purpose.</p>
<p><b>Cumulative Landscape and Visual Impacts</b></p> <p>Cumulative landscape impacts and cumulative visual impacts are best considered separately. The cumulative landscape impacts are the effects of a proposed development on the fabric, character and quality of the landscape; it is concerned with the degree to which a proposed renewable energy development will become a significant or defining characteristic of the landscape.</p> <p>Cumulative visual impacts concern the degree to which proposed renewable energy development will become a feature in particular views (or sequences of views) and the impact this has upon people experiencing these views. Cumulative visual impacts may arise where two or more of the same type of renewable energy development will be visible from the same point or will be visible shortly after each other on the same journey. Hence it should not be assumed that, just because no other site will be visible from the proposed development site, the proposal will not create any cumulative impacts. There is the existing substation and planned extension and the proposed HDVC convertor station to consider in this location (along with the potential Boreas development).</p> <p>This is a sensitive landscape and visual resource. During the winter months in particular the existing substation is easily visible from the A47 near</p>	

Breckland Council Local Impact Report	Applicant's Response
<p>Necton. This makes it a prominent location viewed by local communities and visitors to the area. The planting adjacent to the A47 does not provide complete screening and it is possible to clearly see the substation from a number of key viewpoints.</p> <p>The predicted change in the form of development is of considerable magnitude and size. It is considered that the proposed extension to the existing National Grid substation in Necton would appear as a disproportionate additional development in the countryside. By more than doubling the size of the floor area to cover 51,000 square metres supporting a built height of up to 15 metres would not usually be allowed by the Local Planning Authority except in very special circumstances. Adding to this the 75,000 square metre new substation for the 19 metre tall HVDC convertor station with higher lightening masts, (potentially together with the Boreas development), then land coverage comparable with the core centre of Necton itself, with structures extending much further into the air, would be the outcome.</p> <p>It is appreciated that the Applicant has gone to considerable lengths in assessing visibility and the photomontages produced are helpful. However, on the ground it would be extremely difficult to screen a development of this huge scale. This is defined as a national infrastructure project for a reason and it will appear disproportionately dominant against the landscape which is remote from Necton. The new structures would be of such a size that the perceived distance from the A47 would appear relatively short. This would be a prominent and obtrusive feature against the skyline.</p> <p>The cumulative landscape and visual effects of the development would create negative disbenefits in planning terms. The Secretary of State for Energy must therefore balance the advantages of this major renewable energy project with these negative effects.</p>	
<p><b>Economic and Community Benefits</b></p> <p>In addition the Secretary of State for Energy should also take into consideration any economic and community benefits that may arise from the development. There are opportunities including local employment roles, construction jobs and operation and maintenance requirements over the next 25 years. The Local Authority also welcomes the possibilities of apprenticeships and internships for residents and is committed to working with the Applicant to secure success at the local level.</p> <p>It is, however, difficult to quantify the exact level of direct planning gain this will mean for the</p>	<p>The Applicant proposes to explore how living and working in relative proximity to elements of the UK's new generation of clean, green electricity infrastructure may enable appropriate local investment. It is in this context that the Applicant is seeking to facilitate dialogue which enables open and participative visioning of local futures outside of the DCO process.</p> <p>To date preliminary discussions with the Chair (by telephone, mid-December 2018) and Vice-chair (in person, 16<sup>th</sup> November 2018) of Necton Parish Council have taken place, outlining proposals for exploratory dialogue on local interests and needs. Representatives of Breckland Council and Norfolk</p>

Breckland Council Local Impact Report	Applicant's Response
<p>population of Breckland, especially for the residents of Necton. The Secretary of State should therefore consider what planning obligations may assist in mitigating the impact of the development which would benefit local communities and support the provision of local infrastructure. The planning tests must be met in that the obligations must be fully justified and evidenced to demonstrate they are necessary to make development acceptable in planning terms; directly related to the development; and fairly and reasonably related in scale and kind. The local community must be asked and listened to about what site specific items could be achieved to mitigate the impact of the development. The Local Authority has always encouraged the Applicant to run a regular, inclusive and proactive Local Liaison Group and would reinforce this request in this report. It is envisaged that contributions would be secured via a Community Benefit Fund to be spent in the locality.</p>	<p>County Council have also been approached in relation to forming an advisory panel who might guide a dialogue process, ensuring it is relevant and fit for purpose.</p>
<p><b>Conclusions</b></p> <p>Breckland Council remains supportive of the national and local agenda for using renewable energy technologies and considers it acceptable in principle for this type of development on a commercial scale to be accommodated in the District. However, the landscape of the area is unique and of great importance. The existing substation is significant in terms of visibility from the A47 now and the proposed extension and the HDVC convertor station would result in a disproportionate and dominant impact on the landscape. From the point of view of the Local Planning Authority, these are the two key considerations which the Secretary of State for Energy must balance against one another when reaching a decision on the acceptability of the scheme. If the development is judged to be acceptable then the local community must be consulted on what other site-specific mitigation measures should be secured and spent locally via a Community Benefit Fund. The Local Planning Authority would reinforce its recommendation for the applicant to run a purposeful and meaningful Local Liaison Group in order to achieve this.</p>	<p>The Applicant welcomes Breckland Council's support of renewable energy and has responded to the points raised and will continue to engage through the SoCG (Rep1-SOCG-2.1).</p>