

THE INFRASTRUCTURE PLANNING (EXAMINATION PROCEDURE) RULES 2010

Appendix I to the Relevant Representations of Natural England Seascape Landscape and Visual

For:

The construction and operation of the Five Estuaries Offshore Wind Farm located approximately 37km from the Suffolk Coast in the Southern North Sea.

Planning Inspectorate Reference EN010115

Appendix I - Seascape Landscape and Visual

In formulating these comments, the following documents have been considered:

- [APP-079] 6.2.10 Seascape, Landscape and Visual
- [APP-197] 6.7.10.1 Seascape, Landscape and Visual Methodology
- [APP-198] 6.7.10.2 Seascape, Landscape and Visual Viewpoint Assessment
- [APP-199] 6.7.10.3.1 Seascape and Landscape Visual Figures 10.1 10.5
- [APP-200] 6.7.10.3.2 Seascape and Landscape Visual Figures 10.6 10.10
- [APP-201] 6.7.10.3.3 Seascape and Landscape Visual Figures 10.11 10.15
- [APP-202] 6.7.10.3.4 Seascape and Landscape Visual Figures 10.16 10.20
- [APP-203] 6.7.10.3.5 Seascape and Landscape Visual Figures 10.21 10.25
- [APP-204] 6.7.10.3.6 Figure 10.26 Viewpoint 1 Southwold Gun Hill
- [APP-205] 6.7.10.3.7 Figure 10.27 Viewpoint 2 Dunwich Beach
- [APP-206] 6.7.10.3.8 Figure 10.28 Viewpoint 3 Dunwich Heath Coastguard Cottages
- [APP-207] 6.7.10.3.9 Figure 10.29 Viewpoint 4 Sizewell Beach
- [APP-208] 6.7.10.3.10 Figure 10.30 Viewpoint 5 Thorpeness
- [APP-209] 6.7.10.3.11 Figure 10.31 Viewpoint 6 Aldeburgh
- [APP-210] 6.7.10.3.12 Figure 10.32 Viewpoint 7 Orford Castle
- [APP-211] 6.7.10.3.13 Figure 10.33 Viewpoint 8 Burrow Hill Suffolk Coast Path
- [APP-212] 6.7.10.3.14 Figure 10.34 Viewpoint 9 Orfordness Bomb Ballistics Building
- [APP-213] 6.7.10.3.15 Figure 10.35 Viewpoint 10 Shingle Street
- [APP-214] 6.7.10.3.16 Figure 10.36 Viewpoint 11 Old Felixstowe
- [APP-215] 6.7.10.3.17 Figure 10.37 Viewpoint 12 The Naze Walton
- [APP-216] 6.7.10.3.18 Figure 10.38 Viewpoint 13 Walton Pier
- [APP-217] 6.7.10.3.19 Figure 10.39 Viewpoint 14 Walton Mill Lane
- [APP-218] 6.7.10.3.20 Figure 10.40 Viewpoint A Covehithe
- [APP-219] 6.7.10.3.21 Figure 10.41 Viewpoint B Southwold Pier
- [APP-220] 6.7.10.3.22 Figure 10.42 Viewpoint C Bawdsey Manor
- [APP-221] 6.7.10.3.23 Figure 10.43 Viewpoint D Landguard Fort
- [APP-222] 6.7.10.3.24 Figure 10.44 Viewpoint E Harwich
- [APP-223] 6.7.10.3.25 Figure 10.45 Viewpoint F Clacton on Sea
- [APP-224] 6.7.10.3.26 Figure 10.46 Viewpoint G Foreness Point

Glossary of Acronyms and Abbreviations

EA2	East Anglia TWO
ES	Environmental Statement
EIA	Environmental Impact Assessment
ExA	Examining Authority
HFoV	Horizontal Field of View
LURA	Levelling Up and Regeneration Act
MDS	Maximum Design Scenario
NE	Natural England
PEIR	Preliminary Environmental Information Report
SCHAONB	Suffolk Coast and Heaths Area of Outstanding Natural Beauty
SHC	Suffolk Heritage Coast
SLVIA	Seascape, Landscape and Visual Impact Assessment
SoS	Secretary of State
SVIA	Seascape Visual Impact Assessment
VE	Five Estuaries
WTG	Wind Turbine Generator

Please note: This appendix should be read in conjunction with the Principal Areas of Disagreement Summary Statement (PADSS) contained within our Relevant Representations.

1. Natural England's Advice and Recommendations

A summary of Natural England's advice in relation to Seascape, Landscape and Visual is set out in Table 1. Our advice is supported by Table 2, which details the apparent heights of Five Estuaries' (VE) wind turbine generators (WTGs) at select viewpoints for illustrative purposes.

This advice is offered without prejudice and relates only to the seascape and visual effects associated with the statutory purposes of the Suffolk Coast and Heaths Area of Outstanding Natural Beauty (SCHAONB), the special character of the Suffolk Heritage Coast (SHC), and their seascape settings. We wish to emphasise the following points:

- 1.1 The statutory purpose of a designated landscape extends beyond its boundary to include its setting, where this contributes to the natural beauty of the designation. The seascape component of the setting is fundamental to the character and natural beauty of the SCHAONB and the special character of the SHC. Within the SCHAONB, the presence and special character of the SHC serves to highlight the stretch of coastal edge most sensitive to the potential seascape and visual effects from VE.
- 1.2 Based on the information presented within the Environmental Statement (ES), and with awareness of typical visibility conditions along the Suffolk Coast, Natural England disagrees with the conclusion of 'some not significant effects' on the SCHAONB special qualities and that this would 'not compromise the purposes of designation' (paragraph 10.16.27). Natural England's advice is that there would be significant effects on the SCHAONB special qualities. As detailed in Table 1, we advise that the Applicant should apply the design principles provided to them during pre-application to reduce the potential impacts.
- 1.3 Natural England advises that Section 245 (Protected Landscapes) of the Levelling Up and Regeneration Act (LURA) 2023 places a duty on relevant authorities in exercising or performing any functions in relation to, or so as to affect, land in a National Park, the Broads or an Area of Outstanding Natural Beauty (AONB) ("National Landscape") in England, to seek to further the statutory purposes of the area. The duty applies to local planning authorities and other decision makers in making planning decisions on development and infrastructure proposals, as well as to other public bodies and statutory undertakers. It is anticipated that the government will provide guidance on how the duty should be applied in due course.
- 1.4 In the meantime, and without prejudicing that guidance, Natural England advises that:
 - the duty to 'seek to further' is an active duty, not a passive one. Any relevant authority must take all reasonable steps to explore how the statutory purposes of the protected landscape (A National Park, the Broads, or an AONB) can be furthered.
 - The new duty underlines the importance of avoiding harm to the statutory
 purposes of protected landscapes but also to seek to further the conservation
 and enhancement of a protected landscape that goes beyond mitigation and
 like for like measures and replacement. A relevant authority must be able to
 demonstrate with reasoned evidence what measures can be taken to further
 the statutory purpose.

- The proposed measures to further the statutory purposes of a protected landscape should explore what is possible in addition to avoiding and mitigating the effects of the development, and should be appropriate, proportionate to the type and scale of the development and its implications for the area and effectively secured. Natural England's view is that the proposed measures should align with and help to deliver the aims and objectives of the designated landscape's statutory management plan. The relevant protected landscape team/body should be consulted.
- 1.5 We advise that the Applicant should provide details to demonstrate how it will assist the Secretary of State (SoS) and the Examining Authority (ExA) in fulfilling the duties, following the guidance outlined above.

Table 1 Summary of Key Issues – Seascape Landscape and Visual.

NE Ref	Ref	Comment	Recommendation	Risk (RAG)
Docume	ent(s) Use	d: [APP-079] 6.2.10 Seascape, Landscape and Visual		
I1	Table 10.3, Pages 63 & 64	Natural England notes that the Applicant has introduced a definition of what an "immediate setting" is ("the foreground seascape"), allowing them to assert that the project is a 'horizon development'. However, Natural England advises that the special qualities of the SCHAONB, particularly the wildness and tranquillity special qualities, are highly sensitive to changes in views out to sea and will be affected by the proposed VE development.	The assessment of impacts should focus on the specific impacts of the proposal in question on the special qualities and how they might be mitigated, rather than seek to arbitrarily segment the setting of the SCHAONB.	
12	Table 10.3, Pages 64-67	The apparent heights (expressed in degrees) at which the proposed WTGs will be perceived from key viewpoints sited within the SCHAONB and the SHC are updated in Table 2 below. This evidence is based on the new WTG design parameters presented (the reduction in maximum turbine height to blade tip from 420m as proposed at pre-application to 399m). Natural England advises that this design change suggests that landscape and visual impacts from viewpoints at Dunwich Beach are no longer likely to be significant. These apparent heights values and the lateral spread values (also expressed in degrees) of the Wind Turbine Generators (WTGs) across the perceived horizon should be used to inform judgements on the significance of effects, rather than a simple reliance on separation distance. However, these distances cannot be used to justify 'negligible harm' to the SCHAONB and SHC, since distance does not negate the following:	Further consideration is required of the implication of the apparent heights for the special qualities of the SCHAONB and SHC, as well as Natural England's advice on this matter.	
		 The VE WTGs, even the ~320m blade tip height design option, will appear significantly taller than the 		

NE Ref	Ref	Comment	Recommendation	Risk (RAG)
Docume	ent(s) Use	d: [APP-079] 6.2.10 Seascape, Landscape and Visual		
		Greater Gabbard Offshore Wind Farm (OWF) and Galloper OWF turbines. • The VE WTGs, especially the ~320m design option, will increase the lateral spread of turbines across the horizon, and introduce the presence of a new object on the horizon (the most northerly 8 WTGs) from key viewpoints. The VE WTGs, especially the ~320m design option, will create a densification effect across the horizon when seen in conjunction with the Greater Gabbard and Galloper array turbines.		
13	Table 10.3, Pages 64-67	The Applicant's view is that effects from an increase in WTG density is "considered preferable" to an increase in Horizontal Field of View (HFoV) (Page 66 of APP-079). Natural England cannot find where the evidence supporting this assessment is set out within the Seascape, Landscape and Visual Impact Assessment (SLVIA), particularly in relation to the most northerly grouping of WTGs. Natural England advises that WTG apparent height, turbine density, and turbine lateral spread are three separate parameters that may be used to inform judgements on the significance of effects to the SCHAONB and SHC.	Evidence should be submitted to support the Applicant's assessment that effects from an increase in WTG density is "considered preferable" to an increase in HFoV, and what this outcome means for the assessment of harm to the SCHAONB and SHC.	
14	Table 10.3, Pages 67 & 68	Natural England disagrees with the Applicant's submitted position (Pages 67 & 68 of APP-079) on the "curtaining" effect created by VE WTGs, which Natural England considers as significant . Natural England does not agree that the potential seascape and visual effects of the 16 WTGs, that form the northern array of VE, on the SCHAONB and the SHC, are insignificant in Environmental Impact Assessment (EIA) terms.	The Applicant should carefully consider Natural England's advice on embedded mitigation (see I7) to identify ways to reduce these impacts on the SCHAONB and SCH. We also advise that the Applicant should provide the HfoV expressed in degrees of the gap remaining between the proposed VE array	

NE Ref	Ref	Comment	Recommendation	Risk (RAG)
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		Within the northern array area of VE, the most northerly 8 WTGs have the greatest potential to affect the special qualities of the SCHAONB and the special character of the SHC. This relates to their lateral spread, combined with their apparent height, which from some viewpoints will bridge the gap between Galloper OWF and the consented East Anglia TWO (EA2) array. While the remaining 8 WTGs are, from most views, partially masked by the Galloper WTGs, their sheer size will create a harsh juxtaposition on the horizon with the existing arrays. Natural England advises that further embedded mitigation is required.	and the EA2 array to facilitate an understanding of what an "apparent gap" means.	
		 "the retention of some gap between VE and East Anglia TWO in the majority of views". Natural England advises that the Applicant provides the HFoV expressed in degrees of the gap remaining between the proposed VE array and the East Anglia TWO (EA2) array, to facilitate an understanding of what an "apparent gap" means. "the relatively narrow additional increase in lateral spread of the VE WTGs". Natural England advises that the gap between Galloper OWF and the consented EA2 array will be bridged from some viewpoints, which will remove unhindered views out to sea through the current gap. "their introduction as elements that are similar to those that are present or consented". Natural England advises that the sheer size of the VE turbines 		

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15	Table 10.3, Pages	 (northern array) will create a harsh juxtaposition on the horizon with the existing arrays. "their very long distances from the SCHAONB on the sea skyline". We refer the Applicant to Table 2 below for examples of viewpoints from which the apparent size of the VE WTGs is likely to be significant. Natural England welcomes the reduction in the maximum blade tip height to 399m in the submitted proposal. 	N/A	
I6	69 & 70 Table 10.3, Page 70	Natural England considers that the ~320m blade tip height design is more acceptable, although the apparent heights of the WTGs do not become completely insignificant. The greater northward lateral spread of WTGs combined the densification effects associated with the greater number of WTGs would also result in some significant effects. The ~320m turbines will still appear to be significantly taller than the existing turbines (Galloper and Greater Gabbard arrays), albeit partially obscured. Therefore, the need to consider Natural England's Design Principles remains even for this design. Please note that the illustrative apparent heights of the VE WTGs given the updated 324m height design are presented by Natural England in Table 2 of this response.	N/A	
17	Table 10.3, Pages 68 & 69	We note that the Natural England proposed Design Principles 1, 2 and 3 have not been adopted by the Applicant as embedded mitigation within the submission. Natural England proposed these Design Principles to assist in fulfilling the need for Good Design as outlined in the Overarching National Policy Statement for Energy (EN-1). The Design Principles are as follows:	Further consideration of Natural England's proposed Design Principles, followed by integration of the principles into amended designs.	

NE Ref	Ref	Comment	Recommendation	Risk (RAG)
Docume	nt(s) Use	d: [APP-079] 6.2.10 Seascape, Landscape and Visual		
		Design Principle 1 : Maintain a clear visual gap between VE and the consented EA2 by limiting northward lateral spread of the array.		
		Design Principle 2 : Locate as many turbines as possible on the eastern side of the Northern Development Area in order to increase the separation distance and therefore reduce the apparent height of the WTGs when seen from the SCHAONB and SHC.		
		Design Principle 3 : Ensure that the layout does not create a new distinct object on the far horizon visible from the SCHAONB and SHC (see Figure 10.29e with respect to the most northerly 8 WTGs).		
		We do not agree that the evolution of the project design is acceptable embedded mitigation, or that Design Principles 1, 2 and 3 have been fully considered within the project design.		
18	Table 10.3, Page 71 and Para 10.11.2 31	In relation to the assessment of the sense of enclosure and isolation special quality, we do not agree with the description (Page 71 of APP-079) of the VE array as "relatively permeable", nor that it "does not create enclosure", or that "the apparent height of the VE WTGs is relatively small" (Paragraph 10.11.231 of APP-079).	Further consideration of Natural England's Design Principles is required to reduce the impacts on the special quality to acceptable levels.	
19	Table 10.3, Page 71	Page 71 of APP-079 states that "Visualisations of the ~320 m design scenario (79 turbines) are shown in Figure 10.47 – Figure 10.67." Natural England has been unable to locate these visualisations within the submission material.	The Applicant should ensure all visualisations are provided and submit any omitted into the Examination.	
I10	Table 10.3,	We note that the ES presents a revised indicative Maximum Design Scenario (MDS) layout assessed in the SLVIA. This	The SLVIA should be updated to consider the implications of removing the remaining gap	

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	Pages 71 & 72	array. We cannot see where the assessment considers the potential effect of this. Therefore, Natural England disagrees with the statement that 'VE will entirely occur in the context of the existing developments'. We also disagree that the VE WTGs can be considered as 'generally in keeping' with existing arrays given the starkly differing apparent heights between Galloper / Greater	between the existing/proposed OWF arrays in this area.	
I11	Table 10.3, Page 72 & Table 10.36	Gabbard arrays and VE (see Table 2 below). Natural England welcomes the assessment of the Cumulative Effects on SCHAONB Special Qualities presented in Table 10.36 (APP-079). The assessment recognises the potential for further cluttering effects impacting the "landscape quality" special quality. However, Natural England disagrees with the assessment that the additional cluttering effects from the VE project are appropriately mitigated by the measures set out in the Scenic Quality section in Table 10.36 and we advise that the potential effects on the SCHAONB and SHC from the distinct grouping of 8 WTGs in the remaining gap between the proposed VE array and the EA2 array have not been addressed.	The assessment needs to be updated to consider the additional impact of VE in terms of the 'cluttering' effect identified, the implications for the special qualities, and potential mitigation measures in line with the Natural England Design Principles.	
		We advise that new developments are still being introduced into the seascape setting of the SCHAONB and SHC. The assessment does not explain what the additional impact of VE is in terms of the cluttering effect identified.		
l12	Table 10.3,	Natural England advises that the most northerly 8 WTGs will create and draw focus to a new distinct object on the horizon,	The Applicant should assess the harm from the most northerly 8 WTGs on the statutory purpose	

NE Ref	Ref	Comment	Recommendation	Risk (RAG)
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	Pages 72 & 73	and that the resulting harm from this new object on the statutory purposes of the SCHAONB and the special character of the SHC has not been fully considered in the assessment.	of the SCHAONB and special character of the SHC and identify potential mitigation in line with the Natural England Design Principles.	
I13	Table 10.3, Page 73	Natural England disagrees with the Applicant's assessment on the " curtaining " effect created by VE WTGs , and the justification presented on Page 73 of APP-079. The assessment of the sense of openness and exposure special quality has not properly considered the effect of VE closing of gap between the existing Galloper and Greater Gabbard OWF arrays and the to be built EA2 array. Based upon the evidence provided by the Applicant there is a likelihood that VE would close the last 'gap without turbines' in direct views out to sea along a ~20km stretch of SCHAONB and SHC coastline (Orford Ness to Dunwich).	The Applicant should revisit their assessment of the 'curtaining' effect with respect to the special qualities of the SCHAONB and SHC.	

Table 1 Apparent heights of select viewpoints for illustrative purposes given the WTG maximum height parameters presented in the VE PEIR and ES, in comparison to the apparent heights of Greater Gabbard and Galloper from Orford Ness.

- 1.6 Natural England consider apparent heights of above 0.4 degrees as being potentially significant. Apparent heights which NE considers to be significant are shown in **bold**.
- 1.7 In particular, we draw the Examiners' attention to the value for the viewpoint located on <u>Orford Ness</u>, which should be considered in the context of the highly sensitive nature of this location, principally in terms of potential for significant adverse effects to the SCHAONB wildness and tranquillity special qualities.

Viewpoint	Apparent height of closest WTG for ~420m scenario (PEIR)	Apparent height of closest WTG for 399m MDS scenario (ES)	Apparent height of closest WTG for ~320m scenario (PEIR)	Apparent height of closest WTG for 324m MDS scenario (ES)	Greater Gabbard consented array	Galloper consented array
Southwold (Gun Hill)	0.398	0.367	0.271	0.276		
Dunwich Beach	0.404	0.372	0.273	0.278		
Dunwich Heath	0.487	0.454	0.351	0.356		
Sizewell Beach	0.493	0.458	0.347	0.353		
Thorpeness	0.512	0.475	0.360	0.366		
Aldeburgh	0.515	0.478	0.362	0.368		
Orford Ness	0.566	0.529	0.410	0.416	0.268	0.300