

Vattenfall Wind Power Ltd

Thanet Extension Offshore Wind Farm

Appendix 2 to Deadline 3 Submission: Response to
ExA Action Points arising from Issue Specific
Hearing 4

Relevant Examination Deadline: 3

Submitted by Vattenfall Wind Power Ltd

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Revision A

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Annexes referred to

Annex A	ZTV and Wireframe Visualisations - Calais Dover Ferry Route
	Annex A-1: Calais Dover Ferry Route ZTV
	Annex A-2: Wireline visualisation Viewpoint 1 Calais-Dover Ferry Route
	Annex A-2: Wireline visualisation Viewpoint 2 Calais-Dover Ferry Route
Annex B	Kentish Flats Extension SLVIA Documents
Annex C	Offshore Wind Farm Envelope Layout Examples
	Annex C-1: Kentish Flats and Kentish Flats Extension (please put this first in the series of maps)
	Annex C-2: Greater Gabbard and Galloper
	Annex C-3: Hornsea
	Annex C-4: Arklow Bank

1 Introduction

- 1 This note has been drafted in response to requests by the Examining Authority (ExA) during Issue Specific Hearing 4 (ISH3) on 19/02/2019 and through reference to the ISH1 Action Points document PINS Ref EV-020.
- 2 The ExA, in EV-020 provide five Action Points as follows:
 - Action Point 1 – White Cliffs of Dover: effects of the proposed development on seascape considerations;
 - Action Point 2 – White Cliffs of Dover: views from sea approaches and ferries;
 - Action Point 3 – Kentish Flats and related Offshore Wind Farm Extension(s);
 - Action Point 4 – Interrelationships between onshore and offshore WSIs; and
 - Action Point 5 - SLVIA Effects at Reculver Towers and Roman Fort and Richborough Roman Fort and Amphitheatre.
- 3 Action Points 1, 4 and 5 form the basis of the main body of this document. Action Points 2 and 3 are primarily addressed in Annexes A and B of this document respectively.
- 4 This document reflects the structure of the request and as such the document is laid out in the following way:
 - Section 1: Introduction
 - Subsequent Sections defined according to Action Points.

2 Action Point 1 - White Cliffs of Dover: effects of the proposed development on seascape considerations

5 The ExA Action Point identified in EV-020 is:

White Cliffs of Dover: effects of the proposed development on seascape considerations.

- ***Historic England is requested to provide confirmation in writing of the tentative position put orally that the seascape effects of the proposal on historically important views to the White Cliffs of Dover from the sea (including views of the existing Thanet Offshore Wind Farm (OWF)) would not be harmful.***

6 Whilst this is a question addressed to Historic England and not the Applicant, to assist the Panel the Applicant has provided a summary of the assessment undertaken in relation to the White Cliffs of Dover.

7 The Applicant can confirm that the Cliffs are prominent coastal natural features either side of Dover harbour, and a protected by Area of Outstanding Natural Beauty (AONB), Heritage Coast and Special Area of Conservation (SAC) and other designations. However, they are not considered as to be archaeological or built heritage asset.

8 Nevertheless, they have heritage significance as a setting for Dover Harbour and Castle, and through a general association with historic approaches to Britain along this section of coast, going back to at least the Roman period and with strong associations with the defence of Britain in WWII.

9 The Onshore Cultural Heritage assessment did not provide any specific assessment of this feature in part as it is not a designated built heritage asset, and because of the distance to the proposed development. However, an assessment was provided for Dover Castle. This is presented in section 7.12 of Chapter 7 Onshore Cultural Heritage of Volume 3 of the Environmental Assessment (paragraphs 7.12.94 and following). This assessment concluded:

10 *“There would be no visibility of Thanet Extension (either turbines or any other part of the proposed infrastructure) in views of Dover Castle from the approach to Dover Harbour by sea. Thanet Extension would have no effect on the significance of the Castle, an effect which is Not Significant and no harm is found.”*

- 11 Due to the distance of the TEOW Offshore WTG Array it is not considered that they affect the contribution made by the Cliffs as a setting to the significance of assets in and around Dover Harbour, or the Castle itself, nor the associated defence structures and memorials (such as chain link towers, or the Dover Patrol Monument) in its vicinity. The primacy of the cliffs in the iconic approach from the south, south- west and south-east would continue to be unchallenged.

3 Action Point 2 - White Cliffs of Dover: views from sea approaches and ferries

12 The ExA Action Point identified in EV-020 is:

The Applicant is requested to submit a position statement considering the effect of the proposed development on views toward the White Cliffs from the sea, most notably in views perceived by people using ferry routes inward to the UK. The Applicant is to:

- ***consider whether there is a need to undertake a representative wireline analysis from relevant location(s) at sea; and***
- ***if so to prepare and analyse a representative wireline analysis; or***
- ***if not, to explain why such analysis is not necessary.***

13 The Applicant has provided wireframe visualisations in Annex A to this document.

14 Annex A-1 shows the Zone of Theoretical Visibility (ZTV) of the Thanet Extension Offshore WTG Array, with the alignment of Calais-Dover ferry route mapped on the ZTV.

15 The ZTV indicates theoretical visibility of the Offshore WTG Array from the majority of the Calais-Dover ferry route, however people on the ferry will be viewing from long distances, of approximately 34 km from the approaches to Dover (at its closest point); up to approximately 47 km from Calais.

16 The headland formed around South Foreland provides screening of the Offshore WTG Array in views from the closest section of the ferry route to the White Cliffs, approaching the Port of Dover. The Offshore WTG Array will not be visible from the section of the ferry route where the White Cliffs are most fully appreciated in the foreground at close proximity.

17 Two illustrative viewpoints have been identified on the Calais-Dover ferry route within UK waters, as shown on the ZTV in Annex A-1.

18 Wireline visualisations from each of these viewpoints are shown in Annex A-2.

19 Viewpoint 1 is located on the Calais-Dover ferry route in a location close to the White Cliffs on the approaches to Dover. The viewpoint is illustrative of the location on the ferry route where the Offshore WTG could be most prominent.

- 20 Viewpoint 2 is located on the Calais-Dover ferry route in a location set further offshore in the English Channel, representing more distant visibility of the UK from the ferry.
- 21 The wirelines are presented as two 90 degree views, forming a 180 degree panorama, as indicated by the direction of view symbols on the wireline and in the ZTV (Annex A-1). *(Note: the right-hand side of the top wireline joins with the left-hand side of the bottom wireline to form the 180 degree view).*
- 22 Viewpoint 1 shows the prominent large-scale coastal landform of the White Cliffs in the view north (the port of Dover is indicated for reference).
- 23 From this viewpoint, the Offshore WTG Array will be visible in views experienced by people approaching the UK on the Calais-Dover ferry approximately 34.2 km to the north-east, somewhat obliquely to the main view of the White Cliffs and the Port of Dover to the north/north-west.
- 24 The Offshore WTG Array will be viewed largely within the same visual envelope as the operational Thanet Offshore Wind Farm, but is likely to be more visible, owing to the larger scale of the WTGs and the extended lateral spread of WTGs on the horizon. Part of this extended spread will be towards the White Cliffs, having the effect of partially reducing the open seascape horizon between the White Cliffs and the edge of the wind farm, while still appearing clearly offshore and not appearing to 'close off' the seascape space between the cliffs and the wind farm.
- 25 The scale of the offshore WTGs at such long distances will be relatively small in comparison to the scale of the White Cliffs, such that the cliffs will remain the primary focus and interest in the view owing to their large scale, dramatic form and colour.
- 26 Viewpoint 2 shows the view experienced by people on the Calais-Dover ferry from further out to sea in the English Channel, being illustrative of more distant views of the White Cliffs from the ferry. The scale and prominence of the landform of the White Cliffs is reduced at this distance, but still evident as forming the coastal backdrop of the UK to the north of the English Channel.
- 27 From this viewpoint, the Offshore WTG Array will be visible in views experienced by people approaching the UK on the Calais-Dover ferry approximately 36.0 km to the north, obliquely to the main view of the White Cliffs and the Port of Dover to the west.

- 28 Due to the angle of view from this location, the Offshore WTG Array will appear to be located notably further offshore from the White Cliffs within open seascape, with a large area of seascape separating the Offshore WTG Array from the White Cliffs.
- 29 The effect of the proposed development on views toward the White Cliffs from the sea has been considered, informed by the ZTV and wireline analysis presented in Annex A.
- 30 Although the Thanet Extension Offshore WTG Array is likely to be visible in views perceived by people using ferry routes inward to the UK, The assessment found that Thanet Extension will not have potential to lead to a significant effect on views experienced by people on the Calais-Dover ferry at distances over 34 km, due to the low magnitude of change arising from Thanet Extension at such long distances, in the presence of the distant influence of the operational Thanet Offshore Wind Farm in the baseline and only during infrequent periods of excellent visibility.
- 31 It is assessed that the importance of the view of the iconic White Cliffs of Dover as the first view of the UK for people who come to the country on a boat will not be affected significantly by the Offshore WTG Array and the White Cliffs will remain the primary focus and interest owing to their large scale, dramatic form and colour.
- 32 With regards the heritage significance of the Cliffs lies primarily in their role as a setting for Dover Harbour and as an iconic approach to the British Isles from north-western continental Europe. This position and setting will not be affected by the proposed development and the way in which the cliffs serve as a symbol in relation to the separation and defence of Britain from the continent historically and into the 20th century, nor the Channel beneath it as both divide and transport link, will continue to be readily understandable.
- 33 Whilst the TEOW Offshore WTG Array may be visible in views to the east and north Kent coasts from passengers on ferries or other vessels approaching from the east, this would be in the context of (and behind) existing wind turbines, and busy sea lanes. Any visibility of the turbines would reduce as the cliffs grew larger and any possibility of being seen would vanish by closer in approaches to Dover. The role the cliffs play as a setting to Dover and its various heritage assets would be undiminished. Iconic long views of the cliffs and the Kent countryside behind it would remain essentially unchanged. No effects of any significance are therefore considered to occur to heritage significance of the Cliffs (their heritage significance being as a setting for Dover as described above).
- 34 It is not considered that further assessment or visualisations are required from an onshore (built) heritage or archaeological perspective.

4 Action Point 3 - Kentish Flats and related Offshore Wind Farm Extension(s)

35 The ExA Action Point identified in EV-020 is:

36 ***The Applicant is requested as follows:***

- ***To source and provide the Seascape Landscape and Visual Impact Assessment (SLVIA) report(s) and works plans from the consented Kentish Flats Offshore Wind Farm Extension (OWFE) project;***
- ***To source and provide the Seascape Landscape and Visual Impact Assessment (SLVIA) report(s) and works plans from any other relevant consented OWFE projects which it considers to demonstrate the acceptability of the approach of enveloping an existing offshore wind farm with additional wind turbine generators (WTGs) at a larger scale than the WTGs installed in the original 'host' OWF (referred to in the hearing as the 'donut effect'); and***
- ***To provide 'as built' images of Kentish Flats Extension OWFE and any other OWFE development referred to.***

37 The Applicant can confirm that the Seascape Landscape and Visual Impact Assessment (SLVIA) report(s) and works plans from the consented Kentish Flats Offshore Wind Farm Extension (OWFE) project are provided in Annex B.

38 The Applicant has also provided, in Annex C, examples of other relevant offshore wind farm projects that it considers to demonstrate the acceptability of the approach of enveloping an existing offshore wind farm with additional wind turbine generators (WTGs) at a larger scale than the WTGs installed in the original 'host' OWF (referred to in the hearing as a 'donut' or 'enveloping' effect).

39 As built photographs of Kentish Flats and Kentish Flats Extension can be viewed in the SLVIA_——(6.6.12.2.1 APP-127 Seascape Landscape Visual Impact Assessment - Photomontages (Part 1 of 2). In particular, Kentish Flats and Kentish Flats Extension are best viewed in the baseline panorama photographs from viewpoints on the north Kent coastline, particular from Viewpoint 1 Reculver (Figures 12.27b).

5 Action Point 4 - Interrelationships between onshore and offshore WSIs

40 The ExA Action Point identified in EV-020 is:

The Applicant is to clarify the approach that will be taken where there is overlap between the onshore and offshore Written Schemes of Investigation (WSIs).

41 This Action Point requested clarification of the approach adopted in respect of the archaeological and heritage interest in the area of overlap between the Onshore and Offshore Written Schemes of Investigation (WSI) essentially understood to be the inter-tidal Zone.

42 It is intended that any works will be based on a strategy that takes into account that geoarchaeological and other archaeological interests may be present across the inter-tidal zone. In particular, information pertaining to the geoarchaeological background will be of interest, contributing to a deposit model that straddles the intertidal-zone, and tells the story of the formation of Pegwell bay.

43 It is suggested that pragmatically, interventions or planned works would fall under the remit of the WSI relevant to the techniques used. If a barge-based technique were to be deployed, or divers required, the relevant works would fall under the Offshore WSI, and if trial trenching were proposed at the head of the beach, this would be covered in the Onshore WSI. Both WSIs will refer the requirement for all communications, reporting etc. to be shared between Kent County Council (on behalf of Thanet Council) and Historic England's (HE) Marine and Terrestrial or Scientific Specialist Archaeology teams to ensure that a joined-up approach is maintained.

44 It is intended that this approach will be reflected both in the Onshore and Offshore WSIs which are currently in the process of being agreed with Kent County Council (on behalf of Thanet Council) and Historic England.

6 Action Point 5 - Action Point 3 - SLVIA Effects at Reculver Towers and Roman Fort and Richborough Roman Fort and Amphitheatre

45 The ExA Action Point identified in EV-020 is:

Historic England is to review the extent to which effects of the proposed development on Reculver Towers and Roman Fort and Richborough Roman Fort and Amphitheatre have been considered and advise its position.

The Applicant to review its approach to assessment of effects on Reculver Towers and Roman Fort.

46 Although this point is specifically concerned with SLVIA Effects, the following statement has been prepared by the Applicant's Onshore Cultural Heritage Team.

47 Potential effects on the historic significance of Reculver and Richborough from development within their settings were considered as part of the assessment presented in Volume 3 Chapter 7, at section 7.12.226 and following for Reculver and 7.12.235 and following for Richborough). Visualisations were presented at Figure 12.27 (Volume 2, Chapter 12: Seascape, Landscape and Visual Impact Assessment (PINS Ref APP-053/ Application Ref 6.2.12) for Reculver and Figure 12.35 (Volume 2, Chapter 12: Seascape Landscape and Visual Impact Assessment (Document Ref: 6.2.12) for Richborough. No significant effect was predicted to occur to the Historic Significance of either assets as a result of the construction and operation of the Proposed Development.

48 The assessment method used is considered to be robust and appropriate. It is noted that Historic England have accepted the appropriateness of the assessment methodology in the SoCG.

49 The Applicant's cultural heritage assessor considers that the assessment presented in the ES is valid and does not need to be changed in respect of Cultural Heritage effects.